This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

A 413695

1837
ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
E PLURIBUS UNUM
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

G. S. L.
610.
014
S8

ARTES
SCIENTIA
VERITAS
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

610.
014
S8

OBSTETRICAL TRANSACTIONS.

VOL. XI.

LIBRARY OF THE UNIVERSITY OF MICHIGAN

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

OF

LONDON.

VOL. XI.

FOR THE YEAR 1869.

WITH A LIST OF OFFICERS, FELLOWS, ETC.

LONDON:
LONGMANS, GREEN, AND CO.
1870.

OBSTETRICAL TRANSACTIONS.

VOL. XI.

BRARY
THE
TY OF MICH

LIBRARY OF THE UNIVERSITY OF MICHIGAN

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

OF

LONDON.

VOL. XI.

FOR THE YEAR 1869.

WITH A LIST OF OFFICERS, FELLOWS, ETC.

LONDON:
LONGMANS, GREEN, AND CO.
1870.

PRINTED BY J. E. ADLARD,
BARTHOLOMEW CLOSE.

OBSTETRICAL SOCIETY OF LONDON.

OFFICERS FOR 1870.

ELECTED JANUARY 5TH, 1870.

HONORARY PRESIDENT.	LOCOCK, SIR CHARLES, BART., M.D.
PRESIDENT.	HEWITT, GRAILY, M.D.
VICE-PRESIDENTS.	HOLMAN, CONSTANTINE, M.D., Reigate. LANGMORE, J. CHARLES, M.B. LEISHMAN, WILLIAM, M.D., Glasgow. MURRAY, GUSTAVUS C. P., M.D. TILT, EDWARD JOHN, M.D. WELLS, THOMAS SPENCER, F.R.C.S.
TREASURER.	HICKS, JOHN BRAXTON, M.D., F.R.S.
HONORARY SECRETARIES.	GERVIS, HENRY, M.D. PLAYFAIR, W. S., M.D.
HONORARY LIBRARIAN.	PHILLIPS, JOHN JONES, M.D.
HONORARY MEMBERS OF COUNCIL.	SMITH, WILLIAM TYLER, M.D. OLDHAM, HENRY, M.D. BARNES, ROBERT, M.D. DAVIS, JOHN HALL, M.D.
OTHER MEMBERS OF COUNCIL.	BRAITHWAITE, WILLIAM, M.D., Leeds. COPEMAN, EDWARD, M.D., Norwich. CUMBERBATCH, LAWRENCE TRENT, M.D. CURGENVEN, J. BRENDON, M.R.C.S. ELLIS, ROBERT, M.R.C.S. GASKOIN, GEORGE, M.R.C.S. GRIFFITH, T. TAYLOR, F.R.C.S., Wrexham. HADEN, FRANCIS SEYMOUR, F.R.C.S. HEAD, EDWARD, M.B. HUTCHINSON, JONATHAN, F.R.C.S. IMAGE, W. E., F.R.C.S., Bury St. Edmunds. ROBERTS, DAVID LLOYD, M.D., Manchester. ROGERS, WILLIAM RICHARD, M.D. SCOTT, JOHN, F.R.C.S. SMITH, WM. JOHNSON, M.D., Weymouth. TAYLOR, CHARLES, M.D. WILLIAMS, ARTHUR WYNN, M.D. WILTSHIRE, ALFRED, M.D.

LIST OF PAST PRESIDENTS OF THE SOCIETY.

1859 EDWARD RIGBY, M.D.
1861 WILLIAM TYLER SMITH, M.D.
1863 HENRY OLDHAM, M.D.
1865 ROBERT BARNES, M.D.
1867 JOHN HALL DAVIS, M.D.

REFEREES OF PAPERS FOR THE YEAR 1870

APPOINTED BY THE COUNCIL.

BERRY, SAMUEL, Esq., F.R.C.S., Birmingham.
BRACE, W. H., M.D., Bath.
BRUNTON, JOHN, M.D., M.A.
BUZZARD, THOMAS, M.D.
CHAMBERS, THOMAS, Esq.
CHAVASSE, PYE HENRY, Esq., F.R.C.S., Birmingham.
CLAY, CHARLES, M.D., Manchester.
DRAGE, CHARLES, M.D., Hatfield.
DRUITT, ROBERT, M.R.C.P.
DRUITT, WILLIAM, Esq., F.R.C.S., Wimborne.
FOWLER, JAMES, Esq., Wakefield.
GRIMSDALE, THOMAS F., Esq., Liverpool.
MACKINDER, DRAPER, M.D., Gainsborough.
MADGE, HENRY, M.D.
NEWTON, EDWARD, Esq., F.R.C.S.
RADFORD, THOMAS, M.D., Manchester.
RANDALL, JOHN, M.D.
ROUTH, CHARLES H. F., M.D.
SEDGWICK, LEONARD WILLIAM, M.D.
SQUIRE, WILLIAM, Esq.
WALKER, THOMAS JAMES, M.D., Peterborough.
WOODMAN, WILLIAM BATHURST, M.D.

HONORARY LOCAL SECRETARIES.

Brace, William Henry, M.D.	Bath.
Berry, Samuel, Esq., F.R.C.S.	Birmingham.
Hall, Alfred, M.D.	Brighton.
Swayne, Joseph Griffiths, M.D.	Bristol.
Wilson, Robert James, L.R.C.P.Ed.	St. Leonard's.
Clark, James Fenn, Esq.	Leamington.
Hall, William, Esq.	Leeds.
Skinner, Thomas, M.D.	Liverpool.
Roberts, David Lloyd, M.D.	Manchester.
Copeman, Edward, M.D.	Norwich.
Symonds, Frederick, Esq., F.R.C.S.	Oxford.
Kealy, John R., M.D.	Portsmouth.
Harrinson, Isaac, Esq., F.R.C.S.	Reading.
Fowler, James, Esq.	Wakefield.
Corry, Thomas C. S., M.D.	Belfast.
Burzorjee, Burzorjee Dorabjee, Esq.	Bombay.
Charles, T. Edmonstoune, M.D.	Calcutta.
Shortt, John, M.D.	Madras.
Williams, David John, M.D.	Victoria, Australia.
Fetherston, Gerald H., M.D.	Melbourne, Australia.

OBSTETRICAL SOCIETY OF LONDON.

TRUSTEES OF THE SOCIETY'S PROPERTY.

W. TYLER SMITH, M.D., Upper Grosvenor street.
HENRY OLDHAM, M.D., Finsbury square.
GEO. THOMPSON GREAM, M.D., Upper Brook street.

HONORARY FELLOWS.

BRITISH SUBJECTS.

Elected

1865 BAILEY, HENRY WOODRUFFE, F.R.C.S., Thetford, Norfolk.

1863 BEATTY, THOMAS EDWARD, M.D., M.R.I.A., &c., late Professor of Midwifery at the Royal College of Surgeons of Ireland, President of the King's and Queen's College of Physicians of Ireland; 78, Merrion square north, Dublin.

1862 CHURCHILL, FLEETWOOD, M.D., Professor of Midwifery, King's and Queen's College of Physicians, Ireland; 15, Stephen's green north, Dublin.

1862 MCCLINTOCK, ALFRED H., M.D., late Master of the Lying-in Hospital; 21, Merrion square north, Dublin.

1862 DUNCAN, JAMES MATTHEWS, M.D., A.M., Lecturer on Midwifery and Diseases of Women and Children, Surgeon's Hall; 30, Charlotte square, Edinburgh.

1870 FARRE, ARTHUR, M.D., F.R.S., Physician-Accoucheur to H.R.H. the Princess of Wales; 12, Hertford street, Mayfair.

1862 HALL, ARCHIBALD, M.D., Professor of Midwifery, University of McGill College, Montreal, Canada.

Elected

1862 SIMPSON, SIR JAMES Y., Bart., M.D., D.C.L., Professor of Midwifery, University of Edinburgh, Physician-Accoucheur to the Queen in Scotland; 52, Queen street, Edinburgh.

1870 WEST, CHARLES, M.D., F.R.C.P., Physician to the Hospital for Sick Children; 61, Wimpole street, Cavendish square.

FOREIGN SUBJECTS.

1863 BRAUN, CARL, M.D., Professor of Midwifery, Vienna.

1862 CHANNING, WALTER, M.D., late Professor of Midwifery in the University of Cambridge, Boston, U.S.

1863 DEPAUL, JEAN ANNE HENRI, M.D., Paris.

1862 DUBOIS, BARON PAUL, late Professor of Clinical Midwifery in the Faculty of Medicine, Paris.

1863 FAYE, F. C., Professor of Midwifery in the University of Christiania.

1864 HECKER, C., Munich.

1866 HUGENBERGER, THEODOR, M.D., St. Petersburgh.

1866 LAZAREWITCH, J., Kharkoff, Russia.

1866 LAZZATI, PIETRO, Milan.

1863 MARTIN, EDUARD, M.D., Director of the Institute for Clinical Midwifery at the University, Berlin.

1864 PAJOT, CH., M.D., Professor of Midwifery to the Faculty of Medicine, Paris.

1866 RIZZOLI, FRANCESCO, Bologna.

1862 SCANZONI, F. W. VON, M.D., Professor of Midwifery, Würzburg.

1864 SIMS, J. MARION, M.D., late Surgeon to the Women's Hospital, New York.

1866 THOMAS, ABRAHAM EVERARD SIMON, Leyden.

1862 VIRCHOW, RUDOLF, M.D., Professor of Pathological Anatomy in the University of Berlin.

ORDINARY FELLOWS.

MARCH, 1870.

Those marked thus (*) have paid the Composition Fee in lieu of further annual subscriptions.

Elected

1869 ADAMS, THOMAS RUTHERFORD, M.D., Surgeon to the Croydon General Hospital; 1, Ottoman villas, St. James's road, West Croydon.

1868 ADAMS, WILLIAM, F.R.C.S., 37, Harrington square, N.W.

1859 ALDERSLEY, William Hugh, M.B. Lond., F.R.C.S., South Hayling Island, Havant, Hants.

1861 ALDRIDGE, JOHN PETTY, M.D., Shirley House, Dorchester.

1859 ALLEN, GEORGE, M.D., 11, Soho square.

1859 AMSDEN, GEORGE JOHN, M.D., 85, St. Paul's road, Highbury, N.

1866 ANDREWS, HENRY CHARLES, M.D., 1, Oakley square, N.W.

1859 ANDREWS, JAMES, M.D., 149, Camden road, N.W.

1859 ARCHER, JOHN, F.R.C.S., 9, Carpenter road, Edgbaston, Birmingham.

1861 ARMSTRONG, JOHN, M.D., Gravesend, Kent.

1869 AVELING, CHARLES TAYLOR, 93, High street, Homerton, N.E.

1859 AVELING, JAMES H., M.D., Consulting Surgeon to the Sheffield Hospital for Women; Boley Hill, Rochester, Kent. *Council*, 1865-66.

1859 AYLING, WILLIAM HENRY, L.R.C.P. Ed., 103, Great Portland street, W.

1864 BAKER, G. BENSON, 42, Grove road, St. John's wood, N.W.

Elected

1867 BAKER, JOHN C., M.D., F.R.C.S. Ed.; 132, Duke street, Liverpool.

1859 BAKER, JOHN WRIGHT, Surgeon to the Derbyshire General Infirmary; 102, Friar gate, Derby.

1859 BALLARD, THOMAS, M.D., 10, Southwick place, Hyde Park, W.

1859 BANNISTER, JOHN HENRY, 436, Oxford Street, W.

1869 BANTOCK, GEORGE GRANVILLE, M.D., 44, Cornwall road, Westbourne park, W.

1863 BARKER, EDWARD, F.R.C.S., Senior Surgeon to the Melbourne Hospital, Victoria.

1859 BARNES, ROBERT, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, St. Thomas's Hospital; Physician to the Royal Maternity Charity; 31, Grosvenor street, W. *Vice-Pres.* 1859-60. *Council,* 1861-62, 1867-70. *Treas.* 1863-64. *Pres.* 1865-66.

1859 BARNETT, THOS. W., 72, Fore street, Limehouse, E.

1863 BARRATT, JOSEPH G., M.D., 8, Cleveland gardens, Bayswater, W.

1861* BARTRUM, JOHN S., F.R.C.S., Surgeon to the Bath General Hospital; 41, Gay street, Bath.

1867 BASAN, HORACE, L.R.C.P. Ed., Prebyn, Bedford.

1866 BASSETT, JOHN, Professor of Midwifery at the Queen's College, Birmingham; 144, Hockley hill, Birmingham.

1859 BATEMAN, HENRY, F.R.C.S., 32, Compton Terrace, Canonbury, Islington, N.

1867 BATTEN, RAYNER W., M.D., Physician to the Gloucester General Infirmary; 1, Brunswick square, Gloucester.

1859 BATTYE, RICHARD F., M.R.C.P. Ed., 6, Gloucester street, Belgrave road, Pimlico, S.W.

1859 BECK, T. SNOW, M.D., F.R.S., 71, Portland place, W.

1868 BEIGEL, HERMANN, M.D., Physician for the Department of Skin Disease at Charing Cross Hospital, Physician to the Metropolitan Free Hospital; 56, Russell square, W.C.

1866 BELCHER, HENRY, M.D., L.R.C.P. Ed.; 10, Pavilion Parade, Brighton.

Elected

1867 BENNETT, WILLIAM FORD, 179, Clarendon road, Notting hill, W.

1859 BERRY, SAMUEL, F.R.C.S., Consulting Surgeon-Accoucheur to the Queen's Hospital, and Professor of Midwifery and the Diseases of Women and Children in the Queen's College; Hatfield House, 281, Hagley road, Edgbaston, Birmingham. *Vice-Pres.* 1859. *Hon. Loc. Sec.*

1859 BILLINGHURST, HENRY, M.D., Hundalee, Widmore lane, Bromley, Kent.

1859 BIRD, FREDERIC, M.D., Obstetric Physician to, and Lecturer on Midwifery and Diseases of Women at, the Westminster Hospital, Senior Physician to the Westminster Maternity Charity; 13, Grosvenor street, W. *Council*, 1859.

1868 BLACK, JAMES WATT, M.D., 15, Clarges street, Piccadilly, W.

1859 BLACKSTONE, JOSEPH, Park House, Gloucester road, Regent's park, N.W.

1868 BLAIR, JOHN, Collins street east, Melbourne, Victoria.

1861* BLAKE, THOMAS WILLIAM, Hurstbourne Tarrant, Andover, Hants.

1859 BLAKE, VALENTINE W., F.R.C.S., Surgeon to the Birmingham and Midland Counties Lying-in Hospital; 6, Old square, Birmingham.

1866 BLEASE, THOMAS, Clairville, Altrincham, Cheshire.

1860 BLOOD, MICHAEL, 15, Portland place, St. Helier's, Jersey.

1859 BLOXAM, WILLIAM, M.D., 21, Mount street, Grosvenor square, W.

1868 BOGGS, ALEXANDER, M.D., late of H.M.'s Madras Army; 13, Boulevard de Courcelles, Paris.

1866 BOULTON, PERCY, M.D., 23, Harewood square, Regent's park, N.W.

1868 BOUSFIELD, EDWARD, L.R.C.P. Ed., Market place, Thetford, Norfolk.

1869 BOYD, HERBERT, Royal Victoria Hospital, Netley, Hants.

1859 BRACE, WILLIAM HENRY, M.D., 1, Gay street, Bath. *Hon. Loc. Sec.*

Elected

1862 BRAITHWAITE, WILLIAM, M.D., late Lecturer on Midwifery, Leeds School of Medicine; Clarendon House, Clarendon road, Leeds. *Council*, 1869-70.

1862 BRICKWELL, JOHN, Sawbridgeworth, Herts.

1865 BRIDGMAN, JOHN HENRY, St. James's Lodge, Enfield Highway, Middlesex.

1864 BRIGHT, JOHN MEABURN, M.D., 1, Westbourne villas, Forest hill, Sydenham, S.E.

1869 BRISBANE, JAMES, M.D., 30, Lisson grove, N.W.

1860 BRITTON, WILLIAM SAMUEL, 64, Acacia road, St. John's Wood, N.W.

1866 BRODIE, GEORGE B., M.D., Physician to Queen Charlotte's Lying-in Hospital, 56, Curzon street, Mayfair, W.

1868 BROWN, ANDREW, L.R.C.P. Ed., Elton villa, Bartholomew road, Kentish Town, N.W.

1865 BROWN, DAVID DYCE, M.A., M.D., 22, Union Place, Aberdeen.

1866 BROWN, GEORGE DRANSFIELD, Henley Villa, Uxbridge road, Ealing, Middlesex.

1859 BROWN, RICHARD, M.D., 1, Brunswick Place, Brunswick square, Brighton.

1861 BROWN, SAMUEL WILLIAM, F.R.C.S., Lewisham, Kent.

1866 BROWN, THOMAS, M.D., 236, Kennington park road, S.E.

1865 BROWNE, J. LENNOX, 41, Welbeck street, Cavendish square.

1865 BRUNTON, JOHN, M.D., M.A., Surgeon to the Royal Maternity Charity, 207, Caledonian road, N.

1866 BRYANT, JOHN HENRY, 23A, Sussex square, Hyde Park gardens, W.

1863 BRYANT, THOMAS, F.R.C.S., Assistant-Surgeon to Guy's Hospital; 2, Finsbury square, E.C. *Council*, 1866-67.

1859 BRYANT, WALTER JOHN, F.R.C.S., L.R.C.P. Ed., 23A, Sussex square, Hyde Park gardens, W. *Council*, 1859.

1870 BUCK, JOSEPH RANDLE, L.R.C.P. Ed., Inkberrow, Redditch, Worcestershire.

1861 BUNNY, JOSEPH, M.D., Hon. Surgeon to the Newbury Dispensary; Northbrook street, Newbury, Berks.

1867 BURNETT, CHARLES, M.B., Biggleswade, Bedfordshire.

Elected

1866 BURROWS, JOHN CORDY, F.R.C.S., Consulting-Surgeon to the Brighton Hospital for Sick Children; 62, Old Steine, Brighton.

1862 BURTON, JOHN MOULDEN, F.R.C.S., Lee park Lodge, Lee, Kent, S.E. *Council*, 1868-9.

1870 BURZORJEE, BURZORJEE DORABJEE, Graduate of Grant Medical College, Bombay. *Hon. Loc. Sec.*

1864 BUTLER, FREDERICK JOHN, M.D., Surgeon to Winchester College and St. Cross Hospital, and to the Hants County Hospital, Winchester.

1868 BUTLER, WILLIAM HARRIS, L.R.C.P. Ed., 15, Thomas street, Woolwich.

1868 BUTT, WILLIAM FREDERICK, 17, South street, Park lane, W.

1862 CAMPBELL, CHARLES, M.D., Kingston, Jamaica. [Agent: Mr. Lewis, Gower street.]

1861 CANDLISH, HENRY, M.D., Physician to the Alnwick Infirmary, Bondgate street, Alnwick, Nothumberland.

1861 CANDY, JOHN, M.D., Assistant-Surgeon, H.M.'s 109th Regiment at Mooltan, India. [*Per* Messrs. Price and Boustead, Army Agents, 34, Craven street, Strand, W.C.]

1866 CARLESS, JOHN, M.D., 32, Rectory place, Woolwich.

1863 CARLYLE, DAVID, M.D., 2, Crescent, Carlisle.

1861 CARTER, ALBERT PLEYDELL, Wellington House, 43, London road, Gloucester.

1869 CASKIE, JOHN BOYD, M.D., 89, Goswell Road. E.C.

1869 CASS, WILLIAM CUNNINGHAM, 20, St. George's road, S.W.

1865 CASSELS, THOMAS, M.D., 2, Upper Tachbrook street, Pimlico, S.W.

1863 CAYZER, Thomas, Mayfield, Aigburth, Liverpool.

1864 CHAMBERS, THOMAS, 2A, Sutherland street, Warwick square, S.W.

1859 CHANCE, EDWARD JOHN, F.R.C.S., Surgeon to the Metropolitan Free Hospital and City Orthopædic Hospital; 59, Old Broad street, City, E.C.

1862 CHAPMAN, WALTER, F.R.C.S., Lower Tooting, Surrey.

Elected

1867 CHARLES, T. EDMONSTOUNE, M.D., Professor of Midwifery at the Calcutta Medical College, 10, Harrington street, Calcutta, *Hon. Loc. Sec.*

1865* CHARLTON, EGBERT, M.D., 5, Albion place, Hyde park square, W; 1, Zingara terrace, Farnham, Surrey.

1866 CHATTAWAY, ALLEN G., The Villa, Kingsland, Leominster, Hereford.

1863 CHAVASSE, PYE HENRY, F.R.C.S., 12, The Square, Birmingham.

1868 CHILD, EDWIN, New Malden, Surrey.

1863 CHISHOLM, EDWIN, 46, Margaret street, Wynyard square, Sydney.

1859 CHOLMONDELEY, JOSEPH, Surgeon-Accoucheur to Queen Charlotte's Lying-in Hospital; 3, Nottingham place, Marylebone road, W. *Council*, 1859-60-61.

1859 CHOWNE, WILLIAM DINGLE, M.D., F.R.C.P., Consulting-Physician to Charing Cross Hospital; 17, Hyde park place, Cumberland gate, W. *Council*, 1860-62.

1861 CHURCH, WILLIAM JOHN, F.R.C.S., 22, Circus, Bath.

1859 CLAREMONT, CLAUDE CLARKE, Millbrook House, 1, Hampstead road, N.W.

1861 CLARK, JAMES, M.D., 10, Rothwell street, Regent's park road, N.W.

1859 CLARK, JAMES FENN, 18, York terrace, Leamington. *Hon. Loc. Sec.*

1862 CLARKE, JOHN, Lynton, North Devon.

1859 CLAY, CHARLES, M.D., late Lecturer on Midwifery and Clinical Medicine in St. Mary's Hospital, Manchester; 101, Piccadilly, Manchester. *Council*, 1863-65.

1859 CLAY, JOHN, Professor of Midwifery, Queen's College, Birmingham; 95, Newhall street, Birmingham. *Council*, 1868-69.

1859 CLAYTON, OSCAR, F.R.C.S., Extra Surgeon-in-Ordinary to H.R.H. the Prince of Wales, and Surgeon-in-Ordinary to H.R.H. the Duke of Edinburgh, 5, Harley street, W.

1859 CLEVELAND, WILLIAM FREDERICK, M.D., Stuart villa, 199, Maida vale, W. *Council*, 1863-64.

Elected

1861 CLOGG, STEPHEN, East Looe, Cornwall.

1865* COATES, CHARLES, M.D., Physician to the Bath United General Hospital; 10, Circus, Bath.

1868 COATES, FREDERICK T., 201, Euston road, N.W.

1860 COCKELL, EDGAR, Holly Lodge, Forest road, Dalston, N.E.

1859 COCKELL, FREDERICK EDGAR, 1, Alma villas, Dalston, N.E.

1861 COCKER, JOHN, M.D., F.R.C.P. Ed., Bank Hey, Blackpool, near Preston, Lancashire.

1861 COLLINGWOOD, WILLIAM, 15, St. Thomas street, Southwark, S.E.

1859 COLLINS, CHAMBERS, F.R.C.S., Maryport, Cumberland.

1866 COOMBS, JAMES, M.D., Bedford.

1864 COOPER, GEORGE HENRY C., M.D., Surgeon to the Holloway and N. Islington Dispensary; Surgeon-Accoucheur to the Royal Maternity Charity; 35, Compton terrace, Islington, N.

1861 COOPER, JOHN, M.R.C.P. Ed., Clapham rise, S.W.

1865 COPEMAN, EDWARD, M.D., Physician to the Norfolk and Norwich Hospital; Upper King street, Norwich, *Council*, 1869-70. *Hon. Loc. Sec.*

1866 CORNWALL, JAMES, F.R.C.S., Fairford, Gloucestershire.

1860 CORRY, THOMAS CHARLES STEUART, M.D., L.R.C.P. Ed., Senior Surgeon to the Belfast General Dispensary; 9, Clarendon place, Belfast. *Council*, 1867. *Hon. Loc. Sec.*

1859 CORY, FREDERICK CHARLES, M.D., 8, Nassau Place, Commercial road east, E. *Council*, 1867-69.

1863 COWARD, JOHN W., Christchurch, Canterbury, New Zealand [agents: Messrs. Alfred Hill and Sons, 11, Little Britain].

1869 COX, RICHARD, L.R.C.P. Ed., Theale, near Reading.

1869 COX, WILLIAM, St. Mary's Hospital, Paddington.

1859 CROFT, J. MCGRIGOR A. T., M.D., M.R.C.P., 8, Abbey road, St. John's Wood, N.W.

1866 CROFT, ROBERT CHARLES, L.R.C.P. Ed., 204, Camden road, N.W.

Elected

1861 CROSKERY, HUGH, L.R.C.S., Ireland; Chapelton, Jamaica, [agents: Messrs. Burgoyne, Burbidges and Squire, 16, Coleman street, E.C.]

1860 CROSS, RICHARD, M.D., 5, Queen street, Scarborough, Yorkshire.

1869 CROSS, ROBERT SHACKLEFORD, Petersfield, Hants.

1867 CROUCHER, HENRY, West Hill, Dartford, Kent.

1867 CROWTHER, EDWARD LODEWYK. L.R.C.P. Ed., late Resident Surgeon, Birmingham Lying-in Hospital; Hobarton, Tasmania.

1859 CULPEPER, WILLIAM MOE, 1, Brunswick Terrace, Palace gardens, Kensington, W.

1862 CUMBERBATCH, LAURENCE TRENT, M.D., 25, Cadogan place, Belgrave square, S.W. *Council*, 1868-70.

1867 CUOLAHAN, HUGH, M.D., 9, Grange road, Bermondsey, S.E.

1859 CURGENVEN, J. BRENDON, 11, Craven hill gardens, Bayswater, W. *Council*, 1870.

1868 DALY, FREDERICK HENRY, M.D., 101, Queen's road, Dalston, N.E.

1859 DAVIS, JOHN HALL, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery and Diseases of Women and Children at, the Middlesex Hospital; Physician to the Royal Maternity Charity; Consulting Physician-Accoucheur to the St. Pancras Infirmary; 24, Harley street, Cavendish square, W. *Council*, 1859, 1864-65, 1869-70. *Vice-Pres.* 1861-63. *Pres.* 1867-68.

1863 DAVIS, ROBERT ALEX., M.D., L.R.C.P. Ed. (exam.), Resident Physician, County Asylum, Burntwood, near Lichfield, Stafford.

1859 DAY, WILLIAM HENRY, M.D., Physician to the Samaritan Free Hospital, and to the Margaret street Dispensary; 10, Manchester square.

1866 DEANS, John, 8, Breed's place, Hastings.

1861 DE LA MOTTE, HENRY D. C., Swanage, Dorset.

1869 DEMPSEY, JOSEPH MALDON, M.D., 27, Charterhouse square, E.C.

Elected

1859 DENNY, JOHN, L.R.C.P. Ed., 1, Sumner terrace, Onslow square, Brompton, S.W.

1860 DICKENSON, JOHN, F.R.C.S., Hon. Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire.

1859 DICKSON, JOSEPH, M.D., 56, Bath street, Jersey.

1859 DIXON, JOHN, M.D., 108, Grange road, Bermondsey, S.E.

1870 DODSWORTH, FREDERICK C., Junr., Oxford villa, Turnham green, Middlesex, W.

1859 DRAGE, CHARLES, M.D., Hatfield, Herts. *Council*, 1861-64.

1859 DRUITT, ROBERT, M.R.C.P., 37, Hertford street, Mayfair, W. *Council*, 1859-60. *Vice-Pres.* 1862-64.

1859 DRUITT, WILLIAM, F.R.C.S., Wimborne, Dorset.

1869 DUKE, BENJAMIN, 272, Kennington Park road, S.E.

1859 DUNCAN, JAMES, M.B., 8, Henrietta st., Covent garden, W.C.

1867 DUNDERDALE, WILLIAM, M.D., 25, Neville terrace, Hornsey road, N.

1859 DUNN, ROBERT, F.R.C.S., 31, Norfolk street, Strand, W.C. *Council*, 1860. *Vice-Pres.* 1861-62.

1861 EARLE, JAMES LUMLEY, M.D., Obstetric Surgeon to the Queen's Hospital; 92, New Hall street, Birmingham. *Council*, 1866-67.

1859* EASSON, JAMES, Stoke Pogis, Slough, Buckinghamshire.

1866 EASTON, JOHN, M.D., 20, Connaught square, Hyde Park, W.

1867 EDIS, ARTHUR W., M.D., Assistant-Physician to the Hospital for Women, Soho square; 23, Sackville street, W.

1861 EDWARDS, THOMAS EDWIN, L.R.C.P. Lond.; 98, Gloucester crescent, Hyde park, W.

1866 ELLIOTT, ROBERT ARTHUR, Assistant-Surgeon, 95th Regiment, (India). Chichester.

1862 ELLIS, EDWARD, M.D., Physician to the Victoria Hospital for Children; 118, Warwick street, Belgravia, S.W.

1861 ELLIS, ROBERT, Obstetric Surgeon to the Chelsea, Brompton, and Belgrave Dispensary; 63, Sloane street, S.W. *Council*, 1868-70.

1862 ELLISON, JAMES, M.D., Surgeon to H.M.'s Household, Windsor; 14, High street, Windsor, Berks.

Elected.

1870 EVANS, MAURICE G., M.D. Narberth, Pembrokeshire, S. Wales.

1865 FAIRBANK, THOMAS, M.D., Surgeon to H.M. the Queen and the Royal Household, Windsor Castle; Sheet street, Windsor.

1859 FAIRCLOTH, RICHARD, F.R.C.S., Newmarket, Cambridgeshire.

1867 FAIRLAND, EDWIN JAMES, L.R.C.P. Ed., Staff Assistant-Surgeon, 21st Hussars, Lucknow, Oude; [*per* Horace E. Golding, Esq., Lincoln's Inn Fields.]

1869 FARQUHAR, WILLIAM, M.D., Assistant-Surgeon, Madras Army Garrison, Bangalore, East Indies.

1861 FARR, GEO. F., L.R.C.P. Ed., 20, West Square, Southwark, S.E.

1868 FEGAN, RICHARD, M.D., 1, Charlton Park terrace, Old Charlton, Kent.

1859 FERGUSSON, SIR WILLIAM, Bart., F.R. C.S., F.R.S., Sergeant-Surgeon to H.M. the Queen, Professor of Surgery in King's College and Surgeon to King's College Hospital, Consulting Surgeon to the Samaritan Free Hospital; 16, George street, Hanover square, W. *Vice-Pres.* 1862-63.

1869 FERGUSSON, WILLIAM EDWARD LAING, M.D., 43, Claremont square, Pentonville, N.

1861 FETHERSTON, GERALD H., M.D., L.R.C.P. Ed.; Hon. Physician to the Melbourne Lying-in Hospital, Prahran, Melbourne, Victoria. *Hon. Loc. Sec.*

1869 FISHER, C. HOLDRICH, M.D., Sittingbourne, Kent.

1870 FISHER, JOHN MOORE, M.D., 29, Norfolk street, Strand, W.C.

1865 FITZPATRICK, THOMAS, M.D., 30, Sussex gardens, Hyde park, W.

1868 FLETCHER, EDWARD, Lygon street, Carlton, Melbourne, Victoria.

1865 FOWLER, JAMES, F.S.A., Hon. Surgeon to the Clayton Hospital and Wakefield General Dispensary; 13, South Parade, Wakefield. *Hon. Loc. Sec.*

1866 FOX, CORNELIUS BENJAMIN, M.D., South Cliff, Scarborough.

Elected

1862 FRAIN, JOSEPH, M.D., Hon. Surgeon to the South Shields Dispensary, Frederick street, South Shields.

1861 FRANKLAND, THOMAS THRUSH, Surgeon to the Ripon Dispensary, Ripon, Yorkshire.

1867 FREEMAN, HENRY W., 38, Gay street, Bath.

1867 FRYER, CHARLES, L.K.Q.C.P. Ireland; 69, Rumford street, Chorlton-on-Medlock, Manchester.

1867 FULLER, CHARLES C., 29, Albany street, Regent's park, N.W.

1863 GALTON, JOHN HENRY, M.B. Lond., Foo-choo, China.

1863 GARMAN, HENRY VINCENT, Kent House, Bow road, E.

1859 GASKOIN, GEORGE, 7, Westbourne park, W. *Council*, 1870.

1862 GAYTON, WILLIAM, L.R.C.P. Ed., 85, Brick lane, Spitalfields, N.E.

1869 GEIKIE, WALTER B., M.D., Professor of Midwifery, Victoria University, Toronto, Ontario, Canada.

1859 GERVIS, HENRY, M.D., Assistant Obstetric Physician to, and Lecturer upon Forensic Medicine at, St. Thomas's Hospital; Consulting Physician to the Deaf and Dumb Asylum, and to the Asylum for Fatherless Children; 12, St. Thomas's street, Southwark, S.E. *Council*, 1864-66. *Hon. Sec.* 1867-70.

1866 GERVIS, FREDERICK HEUDEBOURCK, 33, Adelaide road, Haverstock hill, N.W.

1866 GIDDINGS, WILLIAM KITTO, L.R.C.P. Ed., Calverley, near Leeds, Yorkshire.

1860 GILL, SAMUEL LAWRENCE, L.R.C.P. Ed., 4, Campbell terrace, Bow road, E.

1869 GILL, WILLIAM, 43, Woburn place, Russell square, W.C.

1867 GITTINS, JOHN, L.R.C.P. Ed., St. Olave's Union, Parish street, Southwark, S.E.

1869 GODDEN, JOSEPH, L.K.Q.C.P. Ireland; Sudley House, Claughton Firs, Birkenhead.

1868 GODWIN, ASHTON, M.D., 11, Pelham crescent, Brompton, S.W.

1861 GOSS, SAMUEL DAY, M.D., F.R.G.S., 111, Kennington Park road, S.E.

1869 GOSS, TREGENNA BIDDULPH, 31, The Paragon, Bath.

Elected

1859 GOULSTONE, JOHN GRIFFITH, M.D., 30, Clarence street, Liverpool.

1861 GREAM, GEORGE THOMPSON, M.D., F.R.C.P., Physician-Accoucheur to H.R.H. the Princess of Wales; 2, Upper Brook street, Grosvenor square, W. *Council*, 1862-63. *Vice-Pres.* 1864-66.

1859 GREENHALGH, ROBERT, M.D., Physician-Accoucheur to, and Lecturer on Midwifery at, St. Bartholomew's Hospital; Consulting Physician to the Samaritan Free Hospital, and to the City of London Lying-in Hospital; 72, Grosvenor street, W. *Council*, 1863, 1867-69. *Vice-Pres.* 1864-66.

1863 GRIFFITH, G. DE GORREQUER, Physician to the Hospital for Women and Children, Pimlico; Physician-Accoucheur to St. Saviour's Maternity; 9, Lupus street, St. George's square, S.W.

1869 GRIFFITH, JOHN T., M.D., Talfourd House, Camberwell.

1859 GRIFFITH, THOMAS TAYLOR, F.R.C.S., Consulting Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire. *Council*, 1870.

1859 GRIMSDALE, THOS. F., L.R.C.P. Ed., Consulting Surgeon to the Lying-in Hospital, and late Lecturer on Diseases of Children, &c., at the Royal Infirmary School of Medicine; 29, Rodney street, Liverpool. *Council*, 1861-62.

1870 GROSS, REUBEN, M.D., [care of Messrs. J. and A. Macmillan,] St. John's, New Brunswick, Canada.

1865 GWYN, GEORGE F., Westcroft House, Hammersmith, W.

1867 HADAWAY, JAMES, L.R.C.P. Ed., 47B, Welbeck street, Cavendish square, W.

1859 HADEN, FRANCIS SEYMOUR, F.R.C.S., 62, Sloane street, S.W. *Council*, 1861-63, 1868-70. *Vice-Pres.* 1865-67.

1863 HAILEY, HAMMETT, Tickford Lodge, Newport Pagnell, Bucks.

1859 HALL, ALFRED, M.D., Senior Physician to the Brighton Dispensary; 30, Old Steyne, Brighton. *Council.* 1864-65. *Vice-Pres.* 1866-68. *Hon. Loc. Sec.*

1859 HALL, FREDERICK, 1, Jermyn street, St. James's, S.W.

Elected

1867 HALL, JOHN HENRY WYNNE, L.R.C.P. Ed., Barking road, Essex, E. [Agent, Mr T. Beckett, 67, Victoria Dock road, Canning town, E.]

1862 HALL, WILLIAM, Lecturer on Physiology and Diseases of Women and Children, Leeds School of Medicine; Hillary place, Leeds. *Hon. Loc. Sec.*

1860 HARDEY, KEY, Surgeon to the West City Dispensary; 4, Wardrobe place, Doctors' Commons, E.C.

1869 HARDINGE, HENRY, M.D., Physician to the Great Northern Hospital, 18, Grafton street, Bond street, W.

1859 HARPER, PHILIP H., F.R.C.S., 30, Cambridge street, Hyde park, W.

1859 HARRINSON, ISAAC, F.R.C.S., Castle street, Reading, Berks. *Council*, 1862-65. *Hon. Loc. Sec.*

1862 HARRIS, CHARLES, M.D., Northiam, Staplehurst, Sussex.

1861 HARRIS, HERBERT ROBEY, 52, Bolton street, Bury, Lancashire.

1867 HARRIS, WILLIAM H., M.D., Ostacamund, Neilgherries, India [agent: Mr. H. K. Lewis, Gower street].

1861 HARRIS, WILLIAM JOHN, 13, Marine Parade, Worthing.

1865 HARVEY, ROBERT, M.D., Civil Surgeon of Bhurtpore, near Agra, India [*vid* Bombay]. [Per Alex. Harvey, M.D., 228, Union street, Aberdeen.]

1859 HARVEY, WILLIAM, 48, Lonsdale square, Islington, N.

1861 HAVILAND, EDWARD SAVAGE, M.D., 466, Edgeware road, W.

1868 HAY, THOMAS BELL, L.R.C.P. Ed.; 43, Caledonian road, N.

1865 HAYES, HAWKESLEY ROCHE, Basingstoke, Hants.

1862 HAYMAN, CHARLES CHRISTOPHER, M.D., 22, Grand parade, Eastbourne, Sussex.

1869 HAYWARD, SIDNEY, M.D., Physician to the Victoria Hospital for Children, and to the Samaritan Free Hospital for Women; 4, Hobart place, Eaton square, S.W.

1864 HEAD, EDWARD, M.B., Obstetric Physician to, and Lecturer on Midwifery at, the London Hospital; 91, Harley street, W. *Council*, 1870.

1865 HECKFORD, NATHANIEL, East London Children's Hospital, Ratcliff cross, E.

Elected

1867 HEMBROUGH, JOHN WILLIAM, M.D., Waltham, Grimsby.

1869 HEMSTED, HENRY, Whitchurch, Hants.

1860 HESS, AUGUSTUS, M.D., Physician to the Jews' Hospital, Norwood; 14, Artillery place, Finsbury square, E.C.

1859 HEWITT, GRAILY, M.D., F.R.C.P., Professor of Midwifery in University College, London, and Obstetric Physician to University College Hospital; 36, Berkeley square, W. *Hon. Sec.* 1859-64. *Treas.* 1865-66. *Vice-Pres.* 1867-68. *Pres.* 1869-70.

1862 HEWITT, TOM SMITH, M.D., Ivy Cottage, Winkfield, Windsor, Berks.

1867 HICKINBOTHAM, JAMES, L.R.C.P., Ed., 405, Nechell's Park road, Birmingham.

1860 HICKS, JOHN BRAXTON, M.D., F.R.C.P., F.R.S., Physician-Accoucheur to, and one of the Lecturers on Midwifery and the Diseases of Women and Children at, Guy's Hospital; Physician to the Royal Maternity Charity, and to the Royal Infirmary for Diseases of Children and Women, Waterloo road; 9, St.Thomas's street, Southwark, S.E. *Council*, 1861-62, 1869. *Hon. Sec.* 1863-65. *Vice-Pres.* 1866-68. *Treas.* 1870.

1860 HIGGS, THOMAS FREDERIC, L.R.C.P. Ed., 194, High street, Dudley, Worcestershire.

1868 HIME, THOMAS WHITESIDE, M.B., 5, Howard street, Sheffield.

1865 HODDER, EDWARD M., M.D., Lecturer on Obstetrics, Toronto School of Medicine; Toronto, Canada West.

1859 HODGES, RICHARD, M.D., F.R.C.S., 1, Montagu street, Portman square, W.

1859 HODGSON, GEORGE FREDERICK, 52, Montpellier rd., Brighton.

1864 HOFFMEISTER, WILLIAM CARTER, M.D., Surgeon to the Queen in the Isle of Wight; Clifton House, Cowes, Isle of Wight.

1859 HOLMAN, CONSTANTINE, M.D., Reigate, Surrey. *Council*, 1867-69. *Vice-Pres.* 1870.

1860 HOLMAN, HENRY MARTIN, M.D., Hurstpierpoint, Sussex.

1864 HOOD, WHARTON PETER, M.D., 65, Upper Berkeley street, Portman square, W.

Elected

1866 HORNIBLOW, RICHARD E. BRAIN, M.D., 24, Lansdowne place, Leamington.

1861 HORTON, GEORGE EDWARD, 31, Wolverhampton street, Dudley, Worcestershire.

1864 HOUGHTON, HENRY GEORGE, L.K.Q.C.P. Ireland; 6, Mount street, Grosvenor square, W.

1859 HUSSEY, EDWARD LAW, F.R.C.S., Senior Surgeon to the Radcliffe Infirmary, and Consulting Surgeon to the County Lunatic Asylum and the Warneford Asylum; 8, St. Aldate's, Oxford.

1859 HUTCHINSON, JONATHAN, F.R.C.S., Surgeon to the London Hospital; 4, Finsbury circus, E.C. *Council*, 1869-70.

1865 HUTCHINSON, THOMAS STEERS, L.R.C.P. Ed., Newington, Sittingbourne, Kent.

1861 HUTTON, CHARLES, M.D., Physician to the General Lying-in Hospital; 26, Lowndes street, Belgrave square, S.W.

1859 ILOTT, JAMES WILLIAM, Bromley, Kent.

1859 IMAGE, WILLIAM EDMUND, F.R.C.S., Senior Surgeon to the Suffolk General Hospital; Bury St. Edmund's, Suffolk. *Council*, 1870.

1864 JACKSON, EDWARD, M.B., Surgeon to the Sheffield Hospital for Women; Fern Bank, Glossop road, Sheffield.

1864 JACKSON, ROBERT, M.D., 53, Notting Hill square, W.

1868 JAMES, ALFRED, M.D., Perry vale, Forest Hill.

1859 JAMES, HENRY, F.R.C.S., Elmhurst, Weybridge, Surrey. *Council*, 1862-63.

1862 JAY, FREDERICK FITZHERBERT, Peninsular and Oriental Company's Service; Acle, near Norwich, Norfolk.

1863 JENKINS, ROBERT W., 13, Charlotte street, Bedford square, W.C.

1859 JENNINGS, JOSEPH C. S., Abbey House, Malmesbury, Wilts.

1860 JEPSON, HENRY, F.R.C.S., Surgeon to the Kingston Dispensary; Hampton, Middlesex, S.W.

1862 JOHNSON, EDWARD, M.D., 19, Cavendish place, Cavendish square, W.

1861 JONES, EDWARD, M.D., The Park, Sydenham, Kent.

Elected

1868 JONES, EVAN, Ty-Mawr, Aberdare, Glamorganshire.

1859 JONES, GEORGE, 12, New Hall street, Birmingham.

1868 JONES, JOHN, 60, King street, Regent street, W.

1859 JONES, JOHN WILLIAM, Llabedr Lodge, Talybont, Conway.

1866 JONES, ROBERT, 19, Stretford road, Hulme, Manchester.

1868 JONES, WILLIAM, L.R.C.P., Ty-Newydd, Ruabon, Denbighshire.

1870 JONES, WILLIAM, Glynneath, Neath, Glamorganshire.

1868 JORDAN, WILLIAM ROSS, Manor House, Moseley, near Birmingham.

1867 JUNKER, F. ETHELBERT, M.D., 42, Duke street, Grosvenor square. W.

1859 KEALY, JOHN ROBERT, M.D., Admiralty Surgeon, Portsmouth Harbour; Ashley House, Gosport, Hants. *Hon. Loc. Sec.*

1859 KEELE, GEORGE THOMAS, 81, St. Paul's road, Highbury, N.

1859 KENDALL, THOMAS MARSTERS, F.R.C.S., Surgeon to their R.H. the Prince and Princess of Wales at Sandringham, Surgeon to the West Norfolk and Lynn Hospital; King's Lynn, Norfolk.

1868 KENYON, GEORGE A., M.B., Hooton Pagnell, Doncaster, and Fairfield House, Hamilton road, Lower Norwood, Surrey.

1861 KERBEY, WILLIAM HOLMAN, Weobley, Herefordshire.

1865* KERNOT, GEORGE CHARLES, M.D., 3, Chrisp street, Poplar, E.

1859 KIALLMARK, HENRY WALTER, 66, Prince's square, Westbourne grove, W.

1869 KINGSFORD, C. DUDLEY, M.D., Upper Clapton, N.E.

1860 KINGSFORD, EDWARD, F.R.C.S., Surgeon to the Sunbury Dispensary; Sunbury, Middlesex.

1862 KIRKPATRICK, JOHN RUTHERFORD, M.B., Dubl., Examiner in Midwifery, Royal College of Surgeons, Ireland, 32, Rutland square, Dublin.

1860 KISCH, JOSEPH, 2, Circus place, Finsbury circus, E.C.

1867 KNAGGS, HENRY G., M.D., 49, Kentish Town road, N.W.

1867 LANGFORD, CHARLES P., 187, Goswell road, E.C.

Elected

1859 LANGMORE, JOHN CHARLES, M.B., F.R.C.S., 12, Sussex gardens, Hyde Park, W. *Council*, 1861-64. *Vice-Pres.* 1869-70.

1866 LANGSTON, THOMAS, L.R.C.P. Ed., 29, Broadway, Westminster, S.W.

1862 LANPHIER, RICHARD, M.B. Dubl., Alford, Lincolnshire.

1867 LEAF, WALTER, Surgeon to the St. Marylebone General Dispensary; 14, Furnival's Inn, Holborn, E.C.

1859 LEE, NEWTON B. C., 26, Hanley road, Hornsey rise, N.

1859 LEECH, EDWARD, Pallant, Chichester, Sussex.

1860 LEISHMAN, WILLIAM, M.D., Physician to the University Lying-in Hospital, Regius Professor of Midwifery in the University of Glasgow; 156, Bath street, Glasgow. *Council*, 1866-8. *Vice-Pres.* 1869-70.

1868 LESLIE, WILLIAM BURNUP, M.D., Stonehaven, Kincardineshire.

1870 LIGERTWOOD, JOHN, M.D., late Assistant-Surgeon, R.N., China Expedition; 73, Northbrook street, Newbury, Berks.

1867 LILLEY, FREDERICK JOHN, L.R.C.P. Ed., 222, South Lambeth road, S.W.

1868 LLEWELLYN, EVAN, L.R.C.P. Ed., 9, Mount place, London Hospital, E.

1859 LOCOCK, SIR CHAS., Bart., M.D., F.R.C.P., 26, Hertford street, Mayfair, W. *Honorary President.*

1859 LOMBE, THOMAS ROBERT, M.D., Bemerton, Torquay.

1870 LONG, MARK, M.D., Surgeon to the Poplar Hospital, 1, Adelaide Place, Barking road, Canning Town, Essex.

1861 LOVE, GILBERT, Wimbledon, Surrey, S.W.

1866 LOVEGROVE, CHARLES, M.D., Sevenoaks, Kent.

1866 LOW, ALEX. JAMES, Le Coin, St. Brelade's, Jersey.

1862 LOWE, GEORGE, F.R.C.S., Burton-on-Trent, Staffordshire.

1869 LOWNDES, FREDERICK WALTER, 48, Everton Brow, Liverpool.

1866 LUCEY, WILLIAM CUBITT, M.D., Norfolk villas, Junction road, Upper Holloway, N.

1869 LYDALL, WYKEHAM H., 2, Caroline place, Mecklenburgh square, W.C.

Elected

1868 LYNCH, J. ROCHE, 30, Kennington Park road, W.

1859 MACKINDER, DRAPER, M.D., Consulting-Surgeon to the Gainsborough Dispensary; Gainsborough, Lincolnshire.

1866 MADDEVER, JOHN COOMBE, M.D., 19, Battery place, Rothesay.

1859 MACRAE, JOHN, 4, High street, Lewes, Sussex.

1861 MCVEAGH, DENNIS, L.K.Q.C.P. Ireland, 33, Bishop street, Coventry, Warwickshire.

1859 MADGE, HENRY M., M.D., 32, Fitzroy square, W. *Council*, 1863-65.

1868 MARCH, HENRY COLLEY, M.D., 2, West street, Rochdale.

1860 MARLEY, HENRY FREDERICK, Padstow, Cornwall.

1859 MARLEY, RICHARD, Bromyard, near Worcester, Herefordshire.

1868 MARRIOTT, CHARLES WILLIAM, Dynevor House, Leamington, Warwickshire.

1869 MARRIOTT, OSBORNE DELANE, M.B., C.M., Sevenoaks, Kent.

1862 MARRIOTT, ROBERT BUCHANAN, Swaffham, Norfolk.

1862 MARSHALL, JOHN, Liverpool House, Dover.

1859 MARSHALL, JOHN BRAKE, Nightingale road downs, Clapton, N.E.

1859 MARSHALL, PETER, 43, Bedford square, W.C.

1864 MARTIN, LAWRENCE J., M.D., Physician to the Melbourne Lying-in Hospital; 126, Collins street east, Melbourne, Victoria.

1859 MARTYN, WILLIAM, M.D., F.R.C.S., 6, Trevor terrace, Rutland gate, Brompton, S.W.

1866 MATTEI, ANTOINE, M.D., Professor of Midwifery, Rue Thérèse 4, Paris.

1861 MATTHEWS, JOHN, M.D., 4, Mylne street, Myddelton square, E.C.

1867 MAY, HENRY, L.R.C.P. Lond., Fairfield House, Lichfield road, Aston, Birmingham.

Elected

1859 MEADOWS, ALFRED, M.D., Physician-Accoucheur to the General Lying-in Hospital, York road; Physician to the Hospital for Women, Soho square; 27, George street, Hanover square, W. *Council*, 1862-64. *Hon. Sec.* 1865-66. *Hon. Lib.* 1865. *Treas.* 1867-69.

1867 MICKLEY, ARTHUR GEORGE, M.B. Lond., House Surgeon, General Hospital, Nottingham.

1865 MIDDLETON, JOHN W., M.D., 8, Rue Marie de Bourgogne, Brussels.

1867 MILLER, BENJAMIN, 17, St. James's place, S.W.

1869 MILWARD, JAMES, 62, Crockherbtown, Cardiff.

1869 MINNS, PEMBROKE R. J. B., M.D., Thetford, Norfolk.

1859 MITCHELL, JOSEPH THOMAS, F.R.C.S., [8, Percy place,] 176, Clapham road, S.W. *Council*, 1863-67.

1867 MITCHELL, ROBERT NATHAL, M.D., 1, Amersham park villas, New Cross, Kent.

1866 MOLLOY, WM. THOMAS, Balmoral, Victoria.

1869 MOORE, JOSEPH, M.D., 9, Linden villas, Blue Anchor road, Bermondsey, S.E.

1859 MOORHEAD, JOHN, M.D., Surgeon to the Weymouth Infirmary and Dispensary; Weymouth, Dorset.

1868 MOOTOOSAWMY, MOODELLY, P. S., M.D., Native Surgeon, Uncovenanted Service, Madras, Manargoody, Tanjore.

1863 MORGAN, EDWARD, Park street, Llanelly, Caermarthenshire.

1869 MORGAN, W. H., Surgeon 23rd Regiment, Tinilon, Travancore.

1865 MOSELEY, GEORGE, F.R.C.S., 51, Priory road, Kilburn, N.W.

1859 MURRAY, GUSTAVUS CHARLES P., M.D., Obstetric-Physician to the Great Northern Hospital; 17, Green street, Grosvenor square, W. *Council*, 1864-65. *Hon. Sec.* 1866-69. *Vice-Pres.* 1870.

1859 MUSGRAVE, JOHNSON THOMAS, L.R.C.P. Ed., 39, Finchley road, N.W. *Council*, 1859-60.

1859 NAPPER, ALBERT, Broad Oak, Cranleigh, Guildford, Surrey. *Council*, 1866-68.

1863 NASON, JOHN JAMES, M.B. Lond., 11, Bridge street, Stratford-upon-Avon.

Elected

1859 NASON, RICHARD BIRD, Nuneaton, Warwickshire.

1859 NEAL, JAMES, M.D., Hon. Surgeon to the Lying-in Hospital, Birmingham; 85, New Hall street, Birmingham.

1867 NEATE, CHARLES, Uttoxeter, Staffordshire.

1866 NEILD, JAMES EDWARD, M.D., Lecturer on Forensic Medicine, Melbourne University; 166, Collins street east, Melbourne.

1859 NEWMAN, WILLIAM, M.D., Surgeon to the Stamford and Rutland Infirmary; Barn Hill House, Stamford, Northamptonshire.

1859 NEWTON, EDWARD, F.R.C.S., 4, Upper Wimpole street, W. *Council*, 1865-67.

1868 NICHOLLS, JAMES, M.D., Duke street, Chelmsford, Essex.

1861 NICHOLS, GEORGE W., Augusta House, Rotherhithe, S.E.

1869 NORTON, SELBY, M.D., Rye House, Putney Hill, Surrey.

1859 NUNN, THOMAS WILLIAM, F.R.C.S., Surgeon to the Middlesex Hospital; 8, Stratford place, Oxford street, W. *Council*, 1868-69.

1868 OATES, PARKINSON, M.D., 164, Cambridge street, Pimlico, S.W.

1859 OLDHAM, HENRY, M.D., F.R.C.P., Consulting Physician-Accoucheur to, and Lecturer on Midwifery and Diseases of Women and Children at, Guy's Hospital; 26, Finsbury square, E.C. *Vice-Pres.* 1859. *Council*, 1860, 1865-66, 1868-70. *Treas.* 1861-62. *Pres.* 1863-64.

1859 OLDHAM, JAMES, F.R.C.S., Consulting Surgeon to the Brighton Lying-in Institution; 53, Norfolk square, Brighton. *Council*, 1866-68.

1869 ORD, GEORGE RICE, Streatham Hill, Surrey.

1865 ORTIZ, MANUEL MARIA, M.D., Henry street, Port of Spain, Trinidad.

1863 OSWALD, JAMES WADDELL JEFFRIES, L.R.C.P. Ed., 38, Lambeth walk, S.E.

1863 OWEN, ALBERT PHILIP, 16, Tollington road, Holloway, N.

1869 OXLEY, MARTIN G. B., L.K.Q.C.P. Ireland, 49, Rodney street, Liverpool.

Elected

1859 PALFREY, JAMES, M.D., Assistant Obstetric Physician to the London Hospital, 18, Finsbury square, E.C.

1867 PARKS, JOHN, The Wylde, Bury, Lancashire.

1865* PATERSON, JAMES, M.D., Rosewall, Partick, Glasgow.

1860 PAYNE, CHARLES HENRY, M.D., Wimbledon, Surrey.

1866 PEACOCK, ALBERT LOUIS, Ford Cottage, Churchinford, near Honiton, Devonshire.

1864 PEARSON, DAVID RITCHIE, M.D., 23, Upper Phillimore place, Kensington, W.

1859 PEIRCE, RICHARD KING, Surgeon to the Notting Hill and Shepherd's Bush Dispensary, 16, Norland place, Notting Hill, W.

1866 PHILLIPS, JOHN JONES, M.D., Assistant-Obstetric Physician to Guy's Hospital; Assistant-Physician to the Hospital for Sick Children; and Physician to the Royal Maternity Charity; 20, Finsbury square, E.C. *Hon. Lib.* 1870.

1866 PILCHER, WILLIAM JOHN, 43, West street, Boston, Lincolnshire.

1859 PINCHARD, BENJAMIN, M.D., Cottenham, Cambridgeshire.

1868 PLAYFAIR, GEORGE RANKEN, M.D., Surgeon-Major, H.M.'s Indian Army, Principal of the Medical College, Agra.

1864 PLAYFAIR, W. S., M.D., Assistant-Physician for the Diseases of Women and Children to King's College Hospital; 5, Curzon street, Mayfair, W. *Council*, 1867. *Hon. Librarian*, 1868-69. *Hon. Sec.* 1870.

1859* POLLARD, WILLIAM, Surgeon to the Torbay Hospital; Southlands, Torquay, Devon.

1860 POLLOCK, TIMOTHY, M.D., 26, Hatton Garden, E.C. *Council*, 1866-68.

1860 PORTER, CHARLES, 54, Digbeth, Birmingham.

1859 POTTER, JEPHSON, M.D., Physician to the Liverpool General Hospital for Consumption; 6, Soho street, Liverpool.

1864 POTTER, JOHN BAPTISTE, M.D., Assistant-Obstetric Physician to the Westminster Hospital; 56, Maddox street, Bond street, W.

1859 POUND, GEORGE, Odiham, Hants.

Elected

1863 POWELL, JOSIAH T., M.D., 347, City road, E.C.

1864 PRICE, WILLIAM NICHOLSON, Lecturer on Midwifery at the Leeds School of Medicine; 7, East parade, Leeds.

1863 PRICE, WILLIAM PRESTON, M.D., Surgeon to the Metropolitan Infirmary for Scrofulous Children, Margate; 1, Ethelbert Crescent, Margate.

1859 PRIESTLEY, WILLIAM O., M.D., F.R.C.P., Professor of Midwifery in King's College, London; Physician-Accoucheur to King's College Hospital; and Consulting Physician-Accoucheur to the St. Marylebone Infirmary; 17, Hertford Street, Mayfair, W. *Council*, 1859-61, 1865-66. *Vice-Pres.* 1867-69.

1864 PUGH, WILLIAM RUSS, M.D., 131, Collins street east, Melbourne, Victoria.

1859 RADFORD, THOMAS, M.D., Consulting Physician to St. Mary's Hospital, Manchester; Moor field, Higher Broughton, Manchester. *Vice-Pres.* 1859.

1859 RAMSAY, JOHN ALLEN, L.R.C.P. Ed., Great Shelford, Cambridge.

1859 RANDALL, JOHN, M.D., Lecturer on Medical Jurisprudence, St. Mary's Hospital Medical School; Medical Officer, St. Marylebone Infirmary; 14, Portman street, Portman square, W.

1860 RANSOM, ROBERT, M.D., F.R.C.S., 5, Jesus Lane, Cambridge.

1861 RASCH, ADOLPHUS A. F., M.D., Physician to the Eastern Dispensary of the German Hospital; 7, South street, Finsbury square, E.C.

1870 RAY, EDWARD REYNOLDS, Dulwich.

1860* RAYNER, JOHN, M.D., Swaledale House, Quadrant road north, Highbury New park, N.

1859 RAYNES, HENRY, Gringley-on-the-hill, Bawtry, Yorkshire.

1859 REE, HENRY PAWLE, L.R.C.P. Ed., F.R.C.S., St. John's, Fulham, S.W.

1859 REMINGTON, THOMAS, M.D., Visiting Medical Officer to the S. Lambeth and Brixton Dispensary; 1, Grove place, North Brixton, S.W.

Elected

1860 RENTON, JOHN, Orchard House, Shotley bridge, Gateshead, Durham.

1862 RICHARDS, DAVIS, 8, St. George's place, Brighton, Sussex.

1859 RICHARDS, SAMUEL, M.D., 36, Bedford square, W.C. *Council*, 1864-66.

1862 RICHARDS, S. SMITH C., 36, Bedford square, W.C.

1859 RICHARDSON, RICHARD, L.R.C.P. Ed., Rhayader, Radnorshire.

1859 RICHARDSON, WILLIAM THOMAS, Ivy House, Highgate, N.

1859* ROBERTS, DAVID LLOYD, M.D., Surgeon to St. Mary's Hospital, Manchester; 23, St. John's street, Deansgate, Manchester, *Hon. Loc.. Sec. Council*, 1868-70.

1867 ROBERTS, DAVID W., M.D., 59, Charlotte street, Portland place, W.

1860 ROBERTS, ROBERT PRICE, Shamrock House, Rhyl, Flintshire.

1867 ROBINSON, CHARLES A., 30, King Henry's road, Haverstock Hill, N.W.

1859 ROBINSON, THOMAS, M.D., 35, Lamb's Conduit street, W.C.

1868 ROBSON, HOPE F. A., M.D., Iver, near Uxbridge.

1868 ROGERS, ADAM MACDOUGALL, Surgeon, Bombay Army [Agents: Messrs. Grinlay and Co., 55, Parliament street, S.W.]

1859 ROGERS, WILLIAM RICHARD, M.D., Physician to the Samaritan Free Hospital; 56, Berners street, Oxford street, W. *Council*, 1870.

1859 ROOTS, WILLIAM SUDLOW, F.R.C.S., F.L.S., Surgeon to the Royal Establishment at Hampton Court, Kingston-on-Thames.

1860 ROPER, ALFRED GEORGE, 57, North End, Croydon, Surrey.

1865 ROPER, GEORGE, Bank House, Aylsham, Norfolk.

1859 ROSE, HENRY COOPER, M.D., High street, Hampstead, N.W.

1859 ROSS, DANIEL, Surgeon to the Metropolitan Police; 10, Commercial place, Commercial road east, E.

Elected

1859 ROUTH, CHARLES HENRY FELIX, M.D., Physician to the Samaritan Free Hospital for Women and Children; 52, Montagu square, W. *Council*, 1859-61.

1866 RUGG, GEORGE PHILIP, M.D., 1, Stockwell villas, Clapham road, Stockwell, S.W.

1869 RUSSELL, CHARLES JAMES, Rose Cottage, Messingham, Lincolnshire.

1870 RUSSELL, LOGAN D. H., East London Hospital for Children, Ratcliff Cross, E.

1866 SABOIA, V., M.D., Rio de Janeiro [*per* Captain Argollo, 1, Princes Terrace, Bayswater.]

1864 SALTER, JOHN H., D'Arcy House, Tolleshunt D'Arcy, Kelvedon, Essex.

1868* SAMS, JOHN SUTTON, St. Peter's Lodge, Eltham road, Lee, Kent.

1865 SANSOM, ARTHUR ERNEST, M.D., Physician to the Royal Hospital for Diseases of the Chest, City road; 29, Duncan Terrace, Islington, N.

1863 SAVAGE, HENRY, M.D., Consulting Physician to the Samaritan Hospital for Women; 45, Baker street, and Laurie park, South Norwood, S.E.

1870 SCOTT, HENRY THOMAS, Havelock House, Lansdowne road, Croydon, Surrey.

1859 SCOTT, JOHN, F.R.C.S., Surgeon to the Hospital for Women, Soho square; 49, Harley street, Cavendish square, W. *Council*, 1868–70.

1870 SCOTT, JOHN, M.D., New street, Sandwich.

1868 SEALY, GEORGE J., M.D., Oatlands park, Weybridge, Surrey.

1860 SEDGWICK, LEONARD WILLIAM, M.D., 2, Gloucester terrace, Hyde park, W.

1863 SEQUEIRA, HENRY LITTLE, 1, Jewry street, Aldgate, E.C.

1866 SEQUEIRA, JAMES SCOTT, 34, Leman street, Goodman's fields, E.

1860 SEWELL, CHARLES BRODIE, M.D., 76, Guilford street, Russell square, W.C., and 13, Fenchurch street, E.C.

1870 SEYDEWITZ, BARON PAUL VON, M.D., 21, Shadwell road, Upper Holloway road, N.

Elected

1862 SHARMAN, MALIM, Surgeon to the Birmingham Free Hospital for Sick Children; 18, New Hall street, Birmingham.

1859 SHARPIN, HENRY WILSON, F.R.C.S., Surgeon to the Bedford General Infirmary, Bedford.

1860 SHAW, GEORGE, Portland House, Battersea, S.W.

1869 SHAW, HENRY SISSMORE, 112, Upgate, Louth, Lincolnshire.

1859 SHEARMAN, EDWARD JAMES, M.D., F.R.C.S., F.R.S.Ed., Consulting Physician to the Rotherham Dispensary; Moorgate, Rotherham, Yorkshire.

1859 SHEEHY, WILLIAM HENRY, L.R.C.P. Ed., 4, Claremont square, Pentonville, N.

1867 SHEPHERD, FREDERICK, L.R.C.P. Ed., 28, Rochester road, Kentish town, N.W.

1866 SHERATON, GEORGE ROBERT, L.R.C.P. Ed., Sedgefield, Ferryhill, Durham.

1862 SHILLINGFORD, ISAAC SHORTLAND, 124, Hill street, Peckham, S.E.

1859 SHIPTON, WILLIAM PARKER, Consulting Surgeon to the Devonshire Hospital; Buxton, Derbyshire.

1860 SHIRLEY, HENRY JAMES, F.R.C.S., Finchingfield, Braintree, Essex.

1861 SHORTT, JOHN, M.D., Surgeon H.M. Madras Army, and Superintendent-General of Vaccination, Madras Presidency. *Hon. Loc. Sec.* [Agents: Messrs. Baring, Brothers, 8, Bishopsgate within, E.C.]

1860 SKINNER, THOMAS, M.D., Obstetric Physician to the Lying-in Hospital; 1, St. James's road, Liverpool. *Council*, 1865-66. *Hon. Loc. Sec.*

1859 SLEEMAN, PHILIP ROWLING, F.R.C.S., Montrose House, Queen's road, Clifton.

1861 SLOMAN, SAMUEL GEORGE, Farnham, Surrey.

1861 SLYMAN, WILLIAM DANIEL, 26, Caversham road, Kentish Town, N.W.

1860 SMART, THOMAS TOVEY, L.R.C.P. Ed., South Villa, Bedminster, Bristol.

1859 SMILES, WILLIAM, M.D., Surgeon to the House of Correction, Cold Bath Fields; 44, Bedford square, W.C.

Elected

1868 SMITH, CHARLES CASE, F.R.C.S.

1867 SMITH, HEYWOOD, M.B. Oxon., Assistant-Physician to the Hospital for Women, Soho square; 42, Park street, Grosvenor square, W.

1859 SMITH, PROTHEROE, M.D., Physician to the Hospital for Women, Soho square; 42, Park street, Grosvenor square, W.

1859 SMITH, WILLIAM JOHNSON, M.D., Consulting Physician to the Weymouth Infirmary and Dispensary; Greenhill, Weymouth, Dorset. *Council*, 1869-70.

1859 SMITH, W. TYLER, M.D., F.R.C.P., Physician-Accoucheur to, and Lecturer on Midwifery and Diseases of Women and Children at, St. Mary's Hospital; 21, Upper Grosvenor street, W. *Treasurer & Vice-Pres.* 1859-60. *Pres.* 1861-62. *Council*, 1863-70.

1860 SNELL, EDMUND, L.R.C.P. Ed., 59, Stepney green, E.

1866 SOPER, WILLIAM, Medical Officer, Jews' Hospital, Norwood; 4, Clapham rise [283, Clapham road], S.W.

1869 SPAULL, BARNARD, F.R.C.S., 5, Vale place, Hammersmith, W.

1868 SPAULL, BARNARD E., 2, Vale place, Hammersmith, W.

1859 SPENCER, GEORGE, 8, Kensington park road, W.

1860 SPENCER, LAWRENCE, M.D., 9, Winckley square, Preston, Lancashire.

1862 SPRY, GEORGE FREDERICK, M.D., Assistant-Surgeon, 2nd Life Guards, Hyde park barracks, Knightsbridge, W.

1867 SQUAREY, CHARLES E., M.B., Assistant-Physician to the Hospital for Women, 13, Upper Wimpole street.

1859 SQUIRE, WILLIAM, 6, Orchard street, Portman square, W. *Council*, 1866-68.

1860 STEDMAN, ROBERT SAVIGNAC, Sharnbrook Grange, Bedford.

1866 STEELE, ARTHUR BROWNE, L.K.Q.C.P. Ireland, Lecturer on Midwifery, Royal Infirmary School of Medicine; 54, Rodney street, Liverpool.

1869 STEELE, HENRY MURRAY, University College.

1859 STONE, JOSEPH, M.D., 84, Bloomsbury, Oxford street, Manchester.

Elected

1860 STONE, THOMAS, F.R.C.S., Resident Surgeon to Christ's Hospital, Newgate street, E.C.

1859 STOWERS, NOWELL, 125, Kennington park road, Kennington, S.E.

1866 STRANGE, WILLIAM HEATH, M.D., 4, The Avenue, Belsize park, Hampstead, N.W.

1859 STUTTER, FREDERICK AUGUSTUS, M.D., Farnboro' House, Upper Sydenham, Kent.

1862 SUTHERLAND, WILLIAM, M.D., 22, George street, Croydon, Surrey.

1862 SUTTON, FIELD FLOWERS, M.D., Balham hill, Clapham, S.W.

1859 SWAYNE, JOSEPH GRIFFITHS, M.D., Physician-Accoucheur to the Bristol General Hospital; Harewood House, 74, Pembroke road, Clifton, Bristol. *Council*, 1860-61. *Vice-Pres.* 1862-64. *Hon. Loc. Sec.*

1860 SWEETING, GEORGE BACON, M.R.C.P., King's Lynn, Norfolk.

1859 SYMONDS, FREDERICK, F.R.C.S, Surgeon to the Radcliffe Infirmary; 32, or 35, Beaumont street, Oxford. *Council.* 1862-65. *Hon. Loc. Sec.*

1866 TANNAHILL, ROBERT DUNLOP, M.D., Physician to the Lying-in Hospital; 106, Bath street, Glasgow.

1859 TANNER, THOS. HAWKES, M.D., F.L.S., 9, Henrietta street, Cavendish square, W. *Hon. Sec.* 1859-62. *Vice-Pres.* 1863-65.

1859 TAPSON, ALFRED JOSEPH, M.B. Lond., 35, Gloucester gardens, Westbourne terrace, W. *Council*, 1862-64.

1863 TAPSON, JOSEPH ALFRED, Surgeon to the Clapham General Dispensary; 83, High street, Clapham, S.W.

1862 TASKER, RICHARD THOMAS, Melbourne, near Derby.

1859 TAYLOE, EDWARD, South lodge, Clapham common, S.W.

1859 TAYLOR, CHARLES, M.D., Pine house, Camberwell green, S.E. *Council*, 1869-70.

1859 TAYLOR, DAVID, 180, Kennington park road, S.E.

1869 TAYLOR, JOHN, Earl's Colne, Halstead, Essex.

1862 TAYLOR, THOMAS, F.R.C.S., 19, Bennett's Hill, Birmingham.

1862 THANE, GEORGE DANCER, M.D., 15, Montague street, Russell square, W.C.

Elected

1870 THOMAS, J. DAVIES, M.B., University College Hospital, and 44, Mildmay park, N.

1866 THOMPSON, JOHN, M.D., Bideford, Devon.

1867 THOMPSON, JOSEPH, Jun., 1, Oxford street, Nottingham.

1869 THOMPSON, D. R., M.D., M.R.C.S., Officiating Civil Surgeon, Chingleput. [Messrs. De Beaux & Co., Esplanade Dispensary, Black Town, Madras.]

1867 THORBURN, JOHN, M.D., Lecturer on Midwifery, Manchester Royal School of Medicine; 333, Brighton place, Oxford street, Manchester.

1867 THORMAN, THOMAS, 17, Oxford terrace, Hyde park, W.

1860 THORNE, GEORGE LEWORTHY, M.D., Swanage, Dorset.

1862 THORNTON, WILLIAM HENRY, M.D., Springfield terrace, Dewsbury, Yorkshire.

1867 THORNTON, WILLIAM HENRY, Surgeon to the Royal National Sea Bathing Infirmary; Berkeley Lodge, Margate.

1860 TIFFEN, ROBERT, M.D., Wigton, Cumberland.

1866 TILLEY, SAMUEL, 70, Union road, Rotherhithe, S.E.

1859 TILT, EDWARD JOHN, M.D., Consulting Physician-Accoucheur to the Farringdon General Dispensary; 60, Grosvenor street, W. *Council*, 1867-68. *Vice-Pres.* 1869-70.

1859 TIMES, HENRY G., 23, Manchester street, Manchester square, W.

1869 TOMKINS, CHARLES P., L.K.Q.C.P. Ireland, Beddington park, Croydon.

1870 TOWNE, ALEXANDER, Jun., 354, Kingsland road, N.E.

1862 TRACY, RICHARD T., M.D., Physician to the Lying-in Hospital, Melbourne, Victoria.

1865 TREND, HENRY GRISTOCK, L.R.C.P. Ed., 191, Southgate road, Islington, N.

1859 TULLOCH, JAMES STEWART, M.D., Surgeon to the Westbourne Dispensary; 1, Pembridge place, Bayswater, W.

1865 TURNER, JOHN SIDNEY, Surgeon to the Anerley Dispensary Woodside, Anerley road, Upper Norwood, Surrey.

1861 TURNER, RICHARD, Surgeon to the Lewes Dispensary; High street, Lewes, Sussex.

1861 TWEED, JOHN JAMES, Jun., F.R.C.S., 14, Upper Brook street, W.

Elected

1860 VARENNE, EZEKIEL G., Kelvedon, Essex.

1860 VINCENT, PATRICK, Wells-next-Sea, Norfolk.

1864 WAHLTUCH, ADOLPHE, M.D., 280, Oxford street, Manchester.

1860 WALES, THOMAS GARNEYS, Jun., Downham Market, Norfolk.

1869 WALKER, ALFRED, M.B., Physician to the East London Hospital for Sick Children; 16, Keppel street, Russell square, W.C.

1866 WALKER, THOMAS JAMES, M.D., Surgeon to the General Infirmary, Peterborough; 18, Westgate, Peterborough.

1860 WALKER, WILLIAM HENRY, L.R.C.P.Ed., Aldborough, near Darlington, Yorkshire.

1870 WALLACE, FREDERICK, 243, Hackney Road, N.E.

1860 WALLER, JOHN TURPIN, Flegg Burgh, Norfolk.

1867 WALTERS, JAMES HOPKINS, Faringdon, Berks.

1859 WANE, DANIEL, M.D., 20, Grafton street, Bond street, W.

1860 WARD, JOHN, Penistone, Sheffield, Yorkshire.

1859 WARDEN, CHARLES, M.D., Hon. Surgeon to the Birmingham Lying-in Hospital; 39, Temple street, Birmingham.

1862 WATKINS, CHARLES STEWART, 11, Chandos street, Strand, W.C.

1867 WATSON, WASDALE, Loughton House, Park square, Newport, Monmouthshire.

1861 WATTS, GEORGE HENRY, Thatcham, near Newbury, Berks.

1867 WEBB, FRED. E., 113, Maida vale, W.

1859 WEBB, HENRY SPEAKMAN, Welwyn, Herts.

1860 WELCHMAN, CHARLES EDWARD ELLIOT, Bore street, Lichfield, Staffordshire.

1867 WELLER, GEORGE, Forest lodge, Wanstead, Essex.

1859 WELLS, T. SPENCER, F.R.C.S., Surgeon in Ordinary to H.M.'s Household; Surgeon to the Samaritan Free Hospital for Women and Children; 3, Upper Grosvenor street, W. *Council*, 1859. *Vice-Pres.* 1868-70.

1859 WESTMACOTT, JOHN GUISE, M.D., Medical Officer to the Paddington Provident Dispensary; 19, St. Mary's terrace, Paddington, W.

1860 WHEELER, DANIEL, Chelmsford, Essex.

Elected

1860 WHITE, FREDERICK GEORGE, L.R.C.P. Ed., Castle House, Chepstow, Monmouthshire.

1859 WHITEHEAD, JAMES, M.D., Physician to the Manchester Clinical Hospital; 87, Mosley street, Manchester. *Council*, 1859-61. *Vice-Pres.* 1868-69.

1870 WHITEHEAD, JOHN, M.D., 18, Upper Tollington road, Holloway, N.

1865 WHITEHEAD, WALTER, F.R.C.S. Ed., Surgeon to St. Mary's Hospital for the Diseases of Women and Children; 248, Oxford road, Manchester.

1864 WHITMARSH, WILLIAM MICHAEL, M.D., Surgeon to the Hounslow Lying-in Charity; Albemarle House, Hounslow, Middlesex.

1867 WILBE, RICHARD HAYDOCK, M.D., York lodge, 21, Finchley road, St. John's Wood, N.W.

1870 WILKIN, JOHN F., Roxby House, Folkestone.

1866 WILKINS, JOHN, M.B. Lond., Williams' Town, Victoria.

1861 WILLIAMS, ARTHUR WYNN, M.D., Physician to the Samaritan Free Hospital; Physician-Accoucheur to the Western General Dispensary; 1, Montagu square, W. *Council*, 1870.

1861 WILLIAMS, DAVID JOHN, M.D., Queenscliff, Geelong, Victoria, Australia. *Hon. Loc. Sec.* [*Per* J. W. Voss, Esq., Swansea Iron Works, Swansea.]

1864 WILLIAMS, EDWARD, M.D., Holt-street House, Wrexham.

1867 WILLIAMS, EVAN, Bryngwrau, near Holyhead, North Wales.

1867 WILLIAMS, HENRY LLEWELLYN, M.D., 9, Leonard place, Kensington, W.

1860 WILLIAMS, ROBERT HANKINSON, L.R.C.P. Ed., Great Eccleston, near Garstang, Lancashire.

1867 WILLOUGHBY, EDWARD F., M.B., 2, Marquess road, Canonbury, N.

1860 WILLS, JOHN, M.D., St. Helier's, Jersey.

1859 WILSON, JAMES GEORGE, M.D., Professor of Midwifery in the Andersonian University, Glasgow; Physician-Accoucheur to the Glasgow Lying-in Hospital and Dispensary; 9, Woodside crescent, Glasgow. *Council*, 1863-64. *Vice-Pres.* 1865-67.

Elected

1860 WILSON, ROBERT JAMES, M.R.C.P. Ed., 24, Grand Parade, St. Leonard's-on-Sea, Sussex. *Hon. Loc. Sec.*

1865 WILSON, THOMAS, L.R.C.P. Ed. (exam.), Alton, Hants.

1868 WILTON, JOHN, L.R.C.P. Ed., Chalk Pit House, Sutton, Surrey.

1866 WILTSHIRE, ALFRED, M.D., 58, Queen Anne street, W. *Council*, 1870.

1866 WINTERBOTTOM, HENRY, Consulting Surgeon to St. Mary's Hospital, Manchester; 56, Bury New road, Strangeways, Manchester.

1860 WISEMAN, WILLIAM WOOD, Springstone House, Ossett, near Wakefield, Yorkshire.

1868 WOAKES, EDWARD, M.D., Luton, Bedfordshire.

1860 WOOD, WILLIAM JAMES, Brightwaltham, Wantage, Berks.

1864 WOODMAN, WILLIAM BATHURST, M.D., Lecturer on Comparative Anatomy at the London Hospital; 10, Finsbury Pavement, E.C.

1859 WORSHIP, J. LUCAS, Manor House, Riverhead, Sevenoaks, Kent.

1866 YEAMAN, GEORGE, M.D., 91, Sauchiehall street, Glasgow.

1861 YOUNG, WILLIAM BUTLER, 5, Castle street, Reading, Berks.

1869 YULE, JOHN S. C., 52, Bolton street, Bury, Lancashire.

CONTENTS.

	PAGE
List of Officers for 1870	v
List of Presidents	vi
List of Referees of Papers for 1870	vii
List of Honorary Local Secretaries	viii
Trustees of the Society's Property	ix
List of Honorary Fellows	ix
List of Ordinary Fellows	xi
Contents	xliii
List of Plates	xlix
Advertisement	l

January 6th, 1869—

Annual General Meeting.

Fœtus delivered by the assistance of the Cephalotribe (Dr. BRAXTON HICKS) . . . 1

New Vaginal Speculum (Dr. MEADOWS) . 3

Large Polypus Uteri (Dr. GERVIS) . . 4

I. Curious Monstrosity. By Dr. G. DE GORREQUER GRIFFITH 5

II. Case of Extra-uterine Pregnancy, rupture of the Cyst, and death. By ANDREW BROWN, L.R.C.P. Ed. 7

III. Case of Rupture of the Uterus? death and decomposition of the fœtus, blood-poisoning, puncture of the membranes, recovery of the patient. By ROBERT GREENHALGH, M.D. . . 9

Annual Meeting. Reports of Auditors and Hon. Librarian 12, 13

Officers for 1869 14

Annual Address of the President, JOHN HALL DAVIS, M.D. 15

February 3rd, 1869—

Address of the New President, GRAILY HEWITT, M.D. 27

PAGE

Anencephalous Fœtus (Mr. SASS) . . 31
Uterine Fibroid (Mr. T. CHAMBERS) . . 31
IV. Fibroid degeneration of Uterus with sub-peritoneal and interstitial Fibrous Tumours in a state of disintegration. By ARTHUR W. EDIS, M.D., M.R.C.P. 34
V. Casts of the Head of an Anencephalous Fœtus, with description of the labour. By DAVID CARLYLE, M.D., of Carlisle 35
VI. Twins, together with secundines from a case of hydrops amnii, under the care of Dr. GRAILY HEWITT (reported by Mr. WM. HODGSON) . 37
VII. On the Cephalotribe. By J. MATTHEWS DUNCAN, A.M., M.D. 42
VIII. Some remarks on the Cephalotribe. By J. BRAXTON HICKS, M.D., F.R.S. . . . 43

March 3rd, 1869—

New Intra-uterine Pessary to correct deviations and to keep the canal patent after the use of the hysterotome (Dr. ROUTH) . . . 53
Knotted Cord (Dr. BRUNTON) . . . 54
Ditto, of a very unusual character (Dr. MURRAY) . 54
Case of Hydramnios (Dr. RASCH) . . 55
IX. Case of Hydronephrosis of the Fœtal Kidneys impeding labour. By HENRY M. MADGE, M.D. . 55
X. Case of Extra-uterine Pregnancy terminating in sudden death. By WILLIAM MARTYN, M.D., F.R.C.S 57
Report on ditto, by Drs. W. MARTYN, HENRY MADGE, and J. J. PHILLIPS . . . 62
XI. Abscess of Female Urethra. By. F. C. CORY, M.D. 65
XII. Observations and Remarks on cases of Twins. By JOHN BRUNTON, M.A., M.D. . . 67

April 7th, 1869—

Fibroid outgrowth from the Fundus Uteri (Mr. SPENCER WELLS) 73
Report on ditto, by Dr. BRAXTON HICKS . 76
Case of Ovarian Disease (Mr. J. L. WORSHIP) . 76
Intra-uterine Fibroid, removed by single wire écraseur (Dr. MURRAY) . . . 78
Successful case of Tracheotomy in Croup lasting fifty-seven hours (Dr. CORY) . . . 78

PAGE

Instruments of Professor Lazarewitch: new hysteroper, two intra-uterine stems of vulcanite, and uterine sound (Dr. MEADOWS) . . 78

XIII. Unusual and interesting appearance of an Ovum thrown off at the second month, with history of the case. By W. R. ROGERS, M.D., M.R.C.P. . 80

XIV. Hæmorrhage fatal in forty minutes. By J. HYDE HOUGHTON, Esq., of Dudley (communicated by the Hon. Secretaries) . . . 81

XV. Elephantine development of the Clitoris. By W. R. ROGERS, M.D., M.R.C.P. . . . 84

XVI. An inveterate case of Ulceration of the Cervix Uteri cured by the application of Styptic Colloid, with remarks. By JAMES WYNNE, M.D., of Guatemala (communicated by Mr. SPENCER WELLS) 86

May 5th, 1869—

Uterus and Ovaries from the case of fibroid outgrowth from the fundus uteri (see page 73), (Mr. SPENCER WELLS) 97

XVII. Case of Cæsarean Section. By J. BRAXTON HICKS, M.D., F.R.S. 99

XVIII. Case of Amputation of the Cervix Uteri. By ALFRED MEADOWS, M.D. . . . 102

XIX. Hereditary Twin-bearing Family. By J. BRENDON CURGENVEN, M.R.C.S. . . . 106

XX. On Peritoneal Adhesions of the Gravid Uterus as a cause of Post-partum Hæmorrhage. By GRAILY HEWITT, M.D., F.R.C.P. . . . 108

June 2nd, 1869—

Deputation to the Home Secretary and Memorial on the absence of teachers or authorities on Obstetric Medicine in the General Medical Council. 123

New Vesico-vaginal Speculum-holder (Dr. ROUTH) 125

New Method of Embryotomy (Dr. BARNES) . 126

XXI. Case of Double Monstrosity. By J. F. ROGERS, L.R.C.P. Ed. (communicated by Dr. BARNES) . 128

Report of the Infant Mortality Committee . 132

PAGE

June 21st, 1869—

Special General Meeting to consider the Resolutions of the Royal Medical and Chirurgical Society relative to a proposed Union of Medical Societies in London (consequent Resolutions proposed by the Council of the Obstetrical Society, and Discussion thereon) . . . 151

July 7th, 1869—

Perrett's New Infant Feeding Bottle (Dr. B. Hicks) 169

Instrument to aid the Abdominal Muscles in Parturition, and to form a fixed point for attachment of pessaries, &c. (Dr. Protheroe Smith) . 169

Hydrocephalic Fœtus (Dr. A. Edis) . . 173

Four and a half months' Fœtus with Encephalocele (Dr. A. Edis) 173

XXII. Case of Reduction of Chronic Inversion of the Uterus by sustained pressure. By Lawson Tait, M.D. (communicated by Dr. Barnes) . 174

XXIII. On the use of the Whalebone Loop. By John Guise Westmacott, M.D., L.R.C.S. Edin. . 177

XXIV. Teething. By Selby Norton, M.D. . . 183

October 6th, 1869—

Head of a Child delivered by Cephalotripsy, with the instrument (Hicks's) attached (Dr. Barnes). 191

XXV. On Mechanical Support during Labour. By William Woodward, M.D., Worcester (communicated by Dr. Murray) 192

XXVI. Case of Labour complicated with Ovarian Disease. By R. T. Warn, M.R.C.S. (communicated by Dr. Murray) 198

XXVII. Case of Ruptured Uterus, occurring under circumstances of extreme sudden alarm, in about the seventh month of Pregnancy. Death from Peritonitis in eight days and twelve hours from the period of occurrence. By J. T. Mitchell, F.R.C.S. 204

XXVIII. Case of Triplets at upwards of eight months of Pregnancy. By William Martyn, M.D., F.R.C.S. 208

November 3rd, 1869— PAGE

Anencephalous Fœtus with Spina Bifida (Dr. EDWARD JONES) 209

XXIX. Case of Extra-uterine Tubal Fœtation, with specimen. By J. LUCAS WORSHIP, Esq., of Sevenoaks 211

XXX. Four Cases of Congenital Imperforate Vagina, and one Case of Congenital Phymosis, occurring in the same family. By HENRY M. MADGE, M.D. . 213

XXXI. A New Principle of Treatment in Prolapsus and Procidentia Uteri. By J. H. AVELING, M.D. . 215

XXXII. On the Treatment of Hæmorrhage after Labour. By ROBERT BARNES, M.D. 219

December 1st, 1869—

Large Fibroid Polypus removed by the single-wire écraseur (Dr. MEADOWS) 241

Placenta and Knotted Cord (Mr. J. A. TAPSON) . 242

Apparatus for Injecting Solution of Perchloride of Iron into the Uterus for post-partum hæmorrhage (Dr. CLEVELAND) 242

Heart and Lungs of an Infant who died when fourteen days old (Dr. WYNN WILLIAMS) . 242

XXXIII. On the age at which Menstruation commences. By WALTER RIGDEN (communicated by Dr. GRAILY HEWITT) 243

XXXIV. Fibroid Polypus of the Fundus Uteri removed by écraseur; recovery. By DAVID LLOYD ROBERTS, M.D., M.R.C.P. 244

XXXV. Case of Puerperal Fever treated by the Injection of Ammonia into the Veins, followed by recovery. By W. TYLER SMITH, M.D. 247

XXXVI. On the Complication of Pregnancy with Ovarian Disease. By T. SPENCER WELLS, F.R.C.S. . 251

XXXVII. Cases of Pregnancy associated with Ovarian Cystic Disease. By J. BRAXTON HICKS, M.D., F.R.S. 263

XXXVIII. On Puerperal Convulsions, illustrated by cases. By J. HALL DAVIS, M.D. 268

XXXIX. A Case of Spina Bifida. By DAVID LLOYD ROBERTS, M.D., M.R.C.P. 313

Abstract of the Receipts and Expenditure of the Obstetrical Society of London for the eleven years ending December, 1869 316

Index 319

Additions to the Library 335

LIST OF PLATES.

PLATE		PAGE
I.	Large Polypus Uteri (Dr. GERVIS)	4
II.	Extra-Uterine Pregnancy (Dr. MARTYN)	62
III.	Peritoneal Adhesions of the Gravid Uterus (Dr. GRAILY HEWITT)	112
IV.	Ovum thrown off at the second month (Dr. ROGERS)	80
V.	Fibroid Polypus attached to Fundus Uteri (Dr. LLOYD ROBERTS)	247

WOODCUTS.

FIG.		
1.	Knotted Cord of unusual character (Dr. MURRAY)	55
2, 3.	Fibroid Outgrowth from the Fundus Uteri (Mr. SPENCER WELLS)	74–5
4—6.	Instruments of Professor LAZAREWITCH: 4, new hysteroper; 5, two uterine stems; 6, uterine sound, with steel metroscope	79
7, 8.	Elephantine development of Clitoris: 7, front view, 8, back part of clitoris, reduced from natural size (Dr. ROGERS)	84–5
9.	Peritoneal Adhesions of Gravid Uterus: uterus shown as adherent superiorly by bands of lymph to adjacent intestines and abdominal wall, the placenta not yet expelled (Dr. GRAILY HEWITT)	110
10.	Instrument to aid the Abdominal Muscles in Parturition, and to form a fixed point for the attachment of pessaries, &c. (Dr. PROTHEROE SMITH)	171
11.	The Whalebone Loop: Figs. A, B, C, D, showing its position in Delivery (Dr. WESTMACOTT)	180
12.	The Whalebone Loop, showing its construction (ditto)	182
13.	Instrument for Obstetric Support (Dr. WOODWARD)	194
14.	Case of Spina Bifida (Dr. LLOYD ROBERTS)	314

ADVERTISEMENT.

THE SOCIETY is not as a body responsible for the facts and opinions which are advanced in the following papers and communications read, or for those contained in the abstracts of the discussions which have occurred, at the meetings during the Session.

OBSTETRICAL SOCIETY

OF

LONDON.

SESSION 1869.

ANNUAL GENERAL MEETING,

JANUARY 6TH, 1869.

Dr. J. HALL DAVIS, President, in the Chair.

Present—61 Fellows and 7 visitors.

James Watt Black, M.D., and T. B. Hay, L.R.C.P. Ed., were admitted Fellows of the Society.

Edwin Child, M.R.C.S., New Malden, and Thomas Whiteside Hime, M.B., Sheffield, were declared admitted.

William E. L. Fergusson, M.D., and Wykeham H. Lydall, M.R.C.S., were elected fellows of the Society.

The following gentlemen were proposed for election as Fellows of the Society:—Thomas R. Adams, M.D., Croydon; Robert S. Cross, M.R.C.S., Petersfield; Joseph M. Dempsey, M.D., Putney; Henry S. Shaw, M.R.C.S., Louth; Henry Murray Steel, M.R.C.S.; Charles P. Tomkins, M.R.C.S., Croydon; and John S. C. Yule, M.R.C.S., Bury.

Dr. J. BRAXTON HICKS exhibited a fœtus which had been delivered by the assistance of the Cephalotribe. The head

was firmly ossified; and the pelvis of the mother small, with antero-posterior diameter of the brain about three inches; craniotomy had been employed in all her four former labours. She had been in this labour about ten hours, with very vigorous pains before Dr. Hicks saw her, without any attempt of the head to enter fairly the brim. She was placed under chloroform, and examination made with view to turning, but the lower portion of uterus was so firmly contracted round the shoulders of the child that turning would have been very difficult, dangerous to mother, and almost certainly fatal to child. The long forceps were then tried before perforation; but they failed to deliver with all the force which it was safe to exert. Perforation was then adopted without removing the forceps, and traction again employed without result. This instrument was then removed, and the cephalotribe substituted. Upon bringing the screw home first, the slight resistance showed that the base had not been gripped; the blades were reapplied, and then the resistance was much increased; but without difficulty the blades were approximated. Traction was then made, and the flattened head adapted to the brim, when the head was delivered with no more trouble than by the forceps in a case of slight detention. If the head be examined it will be found that the instrument acted in its oblique diameter; one blade passing just below the orbital ridge, and the other on the opposite side of occipital bone. Thus the vault was crushed down on to the base, while the head retained the vertex presentation. It will be recollected that the effect of ordinary pains in the vertex position is to depress the vertical diameter of the vault of the cranium, by pushing the frontal, parietal, and occipital bones backwards. This with the overlapping of the various bones at the sutures, when in the cavity of the pelvis, reduces the head sufficiently to allow its passing a moderate obstruction. The cephalotribe in this case had done the same thing in a more rude manner. For in doing it the bones of the vault had been broken along the line of the pressure of the blades; and frontal bone with the orbital ridge crushed quite in. The integrity of the scalp was entirely preserved, whereby no

spicula was to be felt. Dr. Hicks said that generally he had found there was in heads of ordinary solidity not much fracture, but rather a bending in to the force.

Dr. Hicks further remarked, that by some who have written on the subject there had been associated with the use of this instrument the necessity of utterly destroying the base. But this is really by no means needful in the large majority of cases in which this instrument will be found useful. For if, Dr. Hicks continued, "we consider carefully, it is not the base but the vault which opposes delivery; the base in its vertical diameter does not exceed one and a half. If we can crush down to this we have but little obstacle to delivery. It may require crushing in two or three different times, but the principle is the same. But I have found in a number of experiments that the base generally becomes rather tilted than crushed in, and this is quite sufficient in the greater number of cases where the cephalotribe is employed; for as I have elsewhere pointed out, it is far more likely to take up a position as a substitute for the crotchet and craniotomy forceps than to compete with Cæsarian section, and this remark applies also to the most powerful form of instrument which has been made. The utter destruction of the base exactly laterally is very difficult to secure, and when accomplished does very little better than flattening in the vertical diameter. Indeed, in most cases I should consider it not so good, for the longitudinal diameter of the head opposes the transverse of the pelvis; whereas when the vertical is reduced the transverse of the head only it is which is applied to the transverse of the mother.

"However, I have brought this case forward, as another instance of the extreme facility and safety the instrument gives us in those cases where we generally employ the crotchet and craniotomy forceps. The delivery in this case was over in a few minutes without the least risk; and this with a very firmly ossified head completely above the brim, and contracted pelvis."

Dr. Meadows exhibited a new vaginal speculum. It

resembles Cusco's in regard to the two blades, upper and lower, which are made to diverge when introduced into the vagina by a simple act of pressure: but finding from experience that a very imperfect, and in some cases no view at all can be obtained in this way, owing to the lateral folds of the vagina falling down between the blades, and thus obstructing vision, Dr. Meadows has adapted another narrow blade on each side, making four blades in all. These latter, when the instrument is closed, fall within the two larger blades, and are so hidden as not to interfere with easy introduction. The same act of pressure expands all four blades at once, the vaginal folds are thus prevented from obtruding within the instrument and a perfect view of the parts is obtained.

Dr. Gervis exhibited a large polypus uteri (Plate I). This specimen was taken from a patient whose labour, owing to its large size and unusually extensive attachments to the cervix uteri and vaginal walls, had to be terminated by craniotomy. On the fifth day after the confinement, the tumour was removed by the single wire écraseur. The patient did well for some days, but ultimately succumbed to an attack of peritonitis, which, as it appeared from the post-mortem examination, was unconnected with any pelvic mischief. The section of the cervix was healthy, and healing, and the structure of the uterus, its peritoneal surface, and that of the broad ligaments, was free from any trace of inflammation, while, on the other hand, the coils of the small intestines were extensively agglutinated together by effused lymph. On section the polypus displayed in its interior an oval fibrous tumour, enveloped in a capsule of true uterine tissue, which had been at its upper part continuous with that of the cervix uteri. It is worthy of note that during the first four months of her pregnancy the patient had been subject to profuse hæmorrhage.

...st macoll. del.t et direx.t

W. We

CURIOUS MONSTROSITY.

By Dr. G. de Gorrequer Griffith,

SENIOR MEDICAL OFFICER TO THE HOSPITAL FOR WOMEN AND CHILDREN; PHYSICIAN-ACCOUCHEUR TO ST. SAVIOUR'S MATERNITY, ETC. ETC.

(Communicated by Dr. Routh.)

On Wednesday morning, December 9th, 1868, at a quarter to 5 a.m., I was called to attend Mrs. B—, in labour with her fourth child. She was so unusually large as to convey the idea that she was carrying three or four children, and she was anasarcous, having likewise a peculiarly pasty look. I warned her friends that she would probably have convulsions, and that the labour was likely to be a very hard one. After a careful examination I gave it as my opinion that she was with child of only one fœtus, and that the womb contained an enormous quantity of water. The os uteri being fully dilated at 6 a.m. I ruptured the membranes, though I could not feel the child through them, only through the anterior wall of the uterus. The bed and all the clothes were saturated, and such a torrent of water gushed out that it quite filled two slop-buckets. As she had strong pains I thought the child would immediately follow, but it was not till 8 a.m. that the head descended so low as to allow my putting on the forceps. The head was not large, was very compressible, and had the face directly towards the pubis; but this presentation offered no difficulty, the head being readily rotated. The cranial bones so easily overlapped each other that the forceps could not obtain a firm purchase, and I withdrew them, feeling that they were slipping. At a quarter to 9 a.m. I sent for Mr. Felgate, who kindly gave chloroform. I introduced the left hand into the vagina, but could not pass it into the uterus, owing, as it seemed to me, to the attachment of the fœtus all round to the interior of the uterus. There were good pains, and the womb was firmly contracted on its contents. I had previously given ergot and strychnia. Failing to do any good with any instruments I

discontinued their use, put her comfortably to bed, and as she soon quite woke up from the chloroform and had *no* pains, I left her, instructing the friends and nurse to give some brandy in strong coffee, and to let her have some beef tea, and to send for me when the pains returned. At half-past 10 a.m. I again saw her, and at eleven, as no advance was made, I asked Dr. Oates to see her with me and give her chloroform, which he kindly did. Neither my cephalotribe nor the long forceps could be got sufficiently high up to grasp the head, and the short forceps was powerless to withdraw, though I succeeded in getting the vertex to the vulva. I then craniotomised and drew the head sufficiently low to get the blunt hook into the mouth, and, though using force sufficient to rupture the palate and superior maxilla, and to stretch the neck, I could not stir the body of the fœtus. I was now for the first time able to ascertain the cause of the difficulty, and I said to Dr. Oates, "I believe the child is dropsical."

So large was the woman, *even now*, and so peculiarly tense what was to be felt in utero, that Dr. Oates thought a second bag of waters enclosing a second fœtus was present. This peculiarly tense substance in utero I tapped with the craniotomy scissors, and a gush of water took place, about half the slop-bucketful: Dr. Oates kindly supported and compressed the uterus all the time with a strong binder. I seized the head with the napkined hands and withdrew this male monstrosity; the appended bag being much longer than it is now. During delivery the woman had a convulsive fit. Everything did and has done well, the patient making a speedy recovery. The ergot and strychnia mixture was continued so as to make the enormously distended uterus contract to its proper size. I should mention that, immediately after delivery of the child, I introduced the hand into the uterus and took away the placenta, the plan I invariably adopt in all cases when the after-birth does not come away five or eight minutes subsequent to the birth of the child.

The mother accounts for the deformity by saying that when four months gone she was frightened by a horse-

policeman riding his horse upon the pavement and against her, and that she was particularly startled by the man's long beard, which she imagined he wore as well as his cape.

The bag in addition to containing about three quarters of a pailful of fluid seems to have cerebral matter encased in the usual brain-coverings.

CASE OF EXTRA-UTERINE PREGNANCY, RUPTURE OF THE CYST, AND DEATH.

By Andrew Brown, L.R.C.P.E., L.R.C.S.E.

At half-past four on the morning of the 5th November, 1868, I was requested to visit Mrs. C—, who had just died, and who had not been seen by a medical man during her illness. On arriving at the house I got the following history of her case:—She was a healthy young woman, twenty-three years of age, between four and five months advanced in her third pregnancy, her last menstrual period being about the middle of June. Her first child was born in June, 1864; said to have been a cross birth and stillborn; her second was born in August, 1866, and is now alive. On one or two occasions before her illness she complained of faintness and pain in her side, especially after any fatigue, saying she did not feel as formerly, and thought she must be carrying twins; but on the whole she was in the enjoyment of good health, three or four days before her death walking from Camden Town to Tottenham Court Road and back, occasionally carrying her child, two years of age, in her arms.

At three o'clock in the afternoon of the 4th November she was discovered in the watercloset in a fainting condition. She was at once removed to her bedroom, and had some hot brandy and water; she then complained of pain in the abdomen, but this she attributed to some indigestible article of food of which she had partaken an hour or two previously, and thought with a little rest she would soon be well. How-

ever, the pain, feeling of faintness, &c., continued, and in the evening her symptoms were described at a neighbouring surgery, where she was prescribed for, receiving a mixture containing opium and ether, and ordered to apply hot bottles to her feet, by which means she felt relieved and obtained a little sleep; however, she soon awoke with the same symptoms unabated, and continued restlessly tossing about the bed till death put an end to her sufferings about four o'clock in the morning.

Post-mortem. — Body well nourished; internal organs healthy. On reflecting the abdominal parietes a large clot of blood, about an inch in thickness, was found covering the uterus and pelvic viscera, and on removing the clot and examining the parts it was at once apparent that it was a case of extra-uterine pregnancy situated in the right fallopian tube. The pelvis was filled with fluid blood, and the cyst was quite free from adhesions. The specimen I have placed before the meeting in the state in which it was removed from the body. In meeting with these cases the question naturally arises, What is the proper treatment to pursue, should they be diagnosed during life? Had this case come under observation during life, before rupture of the cyst took place and a correct diagnosis made, or even after the rupture, when the symptoms of internal hæmorrhage would have materially aided in the diagnosis, and from the fact of the cyst being found perfectly free from adhesions, I consider it would have been a suitable case for the performance of gastrotomy, by which means there would have been a reasonable hope of saving the life of the patient with certainly not more risk to life than in the ordinary operation for ovarian disease.

CASE OF RUPTURE OF THE UTERUS? DEATH AND DECOMPOSITION OF THE FŒTUS; BLOOD POISONING; PUNCTURE OF THE MEMBRANES; RECOVERY OF THE PATIENT.

By ROBERT GREENHALGH, M.D.,

PHYSICIAN-ACCOUCHEUR TO, AND LECTURER ON MIDWIFERY AT, ST. BARTHOLOMEW'S HOSPITAL; CONSULTING-PHYSICIAN TO THE CITY OF LONDON LYING-IN AND SAMARITAN HOSPITALS, ETC. ETC.

THE following case presents so many points of interest both as regards diagnosis and treatment, that I feel no apology is needed for occupying the valuable time of the Society with the following details.

Fourteen years ago my opinion was sought about M. A., æt. 34, married many years; pregnant fifteen times; eleven children born alive at the full period, labours and recoveries satisfactory; the last, two years and three months ago.

She states that she had reached nearly seven months of this her sixteenth pregnancy, without any untoward occurrence; when, while lifting a heavy weight, she was suddenly seized with "most agonising pain in the belly, as if something had given way," followed by "a show" from the vagina, faintness, cold clammy sweats, and vomiting. She became deathly pale, "and remained in a state of prostration" for some hours, but eventually rallied after the free exhibition of brandy and opium. For the two following days she felt very weak, when the pain, which had nearly ceased, again commenced, gradually increasing in severity, becoming so acute, that she could "scarcely bear the weight of the bedclothes."

This symptom was preceded by a slight chill, and followed by a "burning fever." At this stage of the inquiry the medical attendant who sought my advice informed me that, as the case was clearly one of acute peritonitis, he had taken twelve ounces of blood from the arm, and placed her upon

calomel and opium and salines, by which the pain and febrile symptoms had been somewhat subdued. On the following day he was induced to bleed her again to the same amount from the other arm, which had the effect of still further lessening the pain and reducing the fever. About this time the breasts became slightly enlarged and tender. During the succeeding fortnight the pain and febrile symptoms lessened under the influence of calomel and opium, salines, hot poultices, and fomentations to the abdomen. Violent and oft-repeated vomitings now ensued, with typhoid symptoms, which for three days resisted every plan of treatment. It was for these symptoms my advice was sought. I found her lying on her back, with the knees drawn up; pulse 140, very feeble; tongue dry and brown; skin hot and dusky; urine scanty and high coloured; respiration hurried and oppressed; frequent green and very offensive stools; the abdomen was greatly distended; umbilicus prominent; a well-defined, round, tense, slightly elastic tumour occupied the hypogastric, umbilical, epigastric and nearly the whole of both iliac regions, dull in every part except about the umbilicus, where it was resonant; fluctuation obscure. The vagina, hot and dry, was much elongated; the cervix uteri soft and nearly obliterated; os uteri pabulous, into which the finger passed easily, impinging upon the tense membranes. The evidence from ballottement was negative. By the stethoscope no fœtal heart-sounds or uterine souffle could be heard. Upon inquiry the patient informed me that, although the fœtus had been active before, she had not felt it since the accident.

Reasoning upon the foregoing facts we assumed that she had sustained, under violent exertion, first, either a rupture of the substance or peritoneal covering of the uterus; that during the state of collapse the fœtus had perished partly from the effects of shock and partly from its being deprived of its due supply of blood. That in consequence of the said rupture peritonitis had ensued; that in the meantime decomposition of the fœtus had been rapidly going on, giving rise to gaseous accumulations within, causing great disten-

sion of the uterus, thus occasioning blood-poisoning, manifested by its usual symptoms. It was, therefore, agreed that I should puncture the membranes not only to relieve the distension of the uterus, but to remove the probable source of infection. I passed a guarded stilette to the upper and posterior part of the uterus, where I punctured the membranes, giving exit to a large quantity of extremely fœtid gas, and some yellowish-brown turbid and stinking liquor amnii, which continued to drain away, followed, in about ten hours, by the expulsion of a fœtus in a far advanced stage of decomposition. The fœtus, apparently about the seventh month of development, presented with the breech; the placenta and funis, much softened, were speedily extracted. There was no hæmorrhage. From this time the vomiting ceased, the fever abated, the tongue becoming moist and clean under the influence of bark, ammonia, iron, stimulants and good diet. In six weeks she had nearly regained her usual good health.

It might appear from the foregoing narration that the diagnosis of this case was easy and the course of treatment obvious; such, however, was not the case.

In the first place, did the patient sustain a rupture of the uterus; if so, was it confined to the peritoneal coat, or did it extend through the walls of the viscus? Assuming such accident to have occurred, was the shock to the nervous system due to such rupture, or to the effusion of blood from the edges of the rent? Upon these points we have no certain evidence upon which to base a positive opinion. It is more than probable, however, that such accident did take place, and that it led to the death of the fœtus, and the subsequent severe attack of peritonitis, from which under somewhat heroic treatment the patient recovered.

In the second place, all the evidence went to prove that she was pregnant, but had not exceeded the seventh month, and yet the abdomen was more distended than it ordinarily is at the full period of utero-gestation; which, at first, led to the inference that she was suffering from dropsy of the amnion, a supposition which was additionally favoured by the elevation of the uterus, the elongation of the vagina, the shortness

of the uterine neck, and the open state of the uterus within which the tense membranes could be detected. But the physical condition which was most puzzling was the tympanitic sound elicited by percussion over the abdominal tumour, and it must be candidly confessed that, up to the puncture of the membranes, and the escape of a large quantity of most fœtid gas, together with the putrid fœtus, all was conjecture and doubt.

As to the plan of treatment, little or no doubt was experienced. It was obvious that the enormous distension of the uterus was exerting injurious pressure upon the abdominal and even thoracic organs, and therefore that that viscus ought to be emptied; but here again a difficulty presented itself, owing to the patient's alarming state of prostration. A fear, and it must be admitted a reasonable fear, was entertained lest by emptying the uterus suddenly, especially if there were a large quantity of liquor amnii, which was assumed to exist, the altered relation of parts might add to the existing danger and thus turn the scale against the patient, and lead to a fatal issue. After much and anxious deliberation it was agreed that a small puncture should be made in the membranes as remote as possible from the os uteri so as to admit of a steady and gradual draining away of the liquor amnii, by which it was hoped that that risk would be avoided and a more uniform and efficient contraction of the uterus would be secured; the sequel proved the wisdom of such a proceeding. The subsequent treatment of this important and interesting case was so obvious and simple as to need no comment.

Annual Meeting.

The Report of the Auditors (Dr. Rogers and Dr. Sansom) for the year ending December 31st, 1868, was read, from which it appeared that the receipts had been £842 13*s.* 6*d.*, of which £62. 7*s.* 2*d.* had arisen from the sale of the 'Trans-

actions.' The expenditure for the year was £751. 0*s*. 9*d*., of which £406. 4*s*. 6*d*. had been expended in furnishing and maintaining the Library and Museum, £217. 17*s*. 3*d*. on the 'Transactions,' and £128. 19*s*. on general expenses. There was a balance in the Treasurer's hands of £91. 12*s*. 9*d*.

The following *Report of the Hon. Librarian* was then read:

"MR. PRESIDENT and GENTLEMEN, — Since our last Annual Meeting the arrangements with regard to our new library and reading-room have been completed, and the Society may now be congratulated on the possession of a handsome suite of rooms, replete with every comfort and convenience. They are situated at No. 291, Regent Street, close to the Polytechnic Institution. Fellows will find that complete arrangements have been made for study and reference, and the Library Committee have recommended the purchase of all the new works on obstetrics, in all its departments, so that we may soon hope to possess a library of reference worthy of the Society.

"The museum of obstetric instruments is arranged in an adjoining apartment. It is already tolerably complete; but, as our funds will not admit of the purchase of new instruments, it is hoped that inventors will present us with specimens to be placed on the shelves.

"A series of large photographic portraits of the Presidents and Honorary Fellows has been obtained, and now adorn the walls. The President has presented a handsome marble clock for the chimney piece.

"During the past year ninety-six volumes have been added to our collection, thirty-four by purchase, sixty-two by gift.

"The number of Fellows availing themselves of the reading-room is already largely increasing, and it is hoped that, as its advantages become better known, a still larger number will visit it.

(Signed) "W. PLAYFAIR, M.D.,
"*Hon. Librarian.*"

The adoption of the report of the Auditors and of the Hon. Librarian was moved by Dr. AVELING, seconded by Dr. BRODIE, and carried unanimously.

Dr. BARNES then, on behalf of the Council, moved the following resolutions, which were seconded by Mr. MITCHELL, and carried unanimously :—" 1. That it is the opinion of the Obstetrical Society of London that the obstetric department of Medicine, and therefore the interests of the public, are inadequately represented in the General Medical Council. 2. That in the event of any revision of the constitution of the Council, provision should be made for the direct representation of obstetric practitioners and teachers. 3. That the Council be requested to draw up a memorial embodying these resolutions, to present it to the Home Secretary, the General Medical Council, and the British Medical Association, and to take such other measures as they may think useful in giving effect to them."

The following resolution, proposed by Dr. SEDGWICK and seconded by Dr. MARTYN, was carried unanimously :

"That the best thanks of the Society be and are hereby given to the President and officers of the Society for their services during the past year, and that the best thanks of the Society be given in an especial manner to the retiring President, Dr. JOHN HALL DAVIS."

The report of the scrutineers (Dr. BRUNTON and Mr. MITCHELL) was read, and the following gentlemen were elected officers of the Society for the year 1869 :

Honorary President.—Sir C. Locock, Bart., M.D.

President.—Graily Hewitt, M.D.

Vice-Presidents.—Dr. Langmore, Dr. Leishman, Glasgow ; Dr. Priestley, Dr. Tilt, Mr. Spencer Wells, and Dr. Whitehead, Manchester.

Treasurer.—Dr. Meadows.

Honorary Secretaries.—Dr. Murray, Dr. Gervis.

Honorary Librarian.—Dr. Playfair.

Honorary Members of Council.—Dr. Tyler Smith, Dr. Oldham, Dr. Barnes, Dr. Hall Davis.

Other Members of Council.—Dr. Braithwaite, Leeds ; Mr.

Burton, Mr. Clay, Birmingham; Dr. Copeman, Norwich; Dr. Cory, Dr. Cumberbatch, Mr. Ellis, Dr. Greenhalgh, Mr. Haden, Dr. Hicks, Dr. Holman, Reigate; Mr. Jonathan Hutchinson, Mr. Nunn, Dr. Parson, Dr. Roberts, Manchester; Mr. Scott, Dr. Smith, Weymouth; and Dr. Charles Taylor.

The PRESIDENT then delivered the Annual Address.

ANNUAL ADDRESS.

By JOHN HALL DAVIS, M.D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON; OBSTETRIC PHYSICIAN AND LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT THE MIDDLESEX HOSPITAL; PHYSICIAN TO THE ROYAL MATERNITY CHARITY.

GENTLEMEN,—Having brought to a close another session of our Society, it is now my duty, in conformity with an appropriate custom, before we enter upon the work of another year, to present to you a brief retrospect of the principal events of the year which has just expired. In the first place, I have the pleasure of informing you that during the past year our numbers, notwithstanding losses of thirty-two Fellows by death or otherwise, have been increased to 600. Forty-four new Fellows have joined our ranks during the year. We have to regret the deaths of seven Fellows during the same period; and as a tribute of respect to their memories let me say a few words. Of those who were so lately associated with us, but who have now by the dispensation of Providence been removed from amongst us, we have to record the following:

Dr. M. W. Turnbull, Physician to the Lying-in Hospital, of Melbourne, in our South Australian colony, Victoria, and joined our Society in 1864. He died October 3rd, 1867, at Melbourne, aged 47; and I have been informed by a resident of Melbourne who very recently arrived in England that he was much esteemed in that city for his professional abilities and social qualities.

Dr. Edward Ray, F.R.C.S., who died on the 22nd of February, aged 50, at Dulwich, where he had practised for many years. From the obituary memoirs communicated to our journals by those who were well acquainted with his great merits, I gather the following abstract. Few in our profession have ever ended their worldly toil with the universal regret that has been expressed for Dr. Ray. He enjoyed the confidence of his patients, the esteem of his neighbours, and the friendship of his medical brethren. Few men possessed a higher sense of professional honour, to very few has it been permitted to win the confidence of his brother practitioners. That his professional knowledge must have been more than that ordinarily possessed is clear from the fact that, when he presented himself among many candidates from all parts of the kingdom for the M.D. of St. Andrew's, he was specially invited by the examiners to compete for honours, and was bracketed first on the prize list. His knowledge, moreover, was combined with a remarkable modesty, so that he never pressed his opinion upon the practitioner with whom he was consulting, although it was evident how clear and judicious was the view which he had taken of the case. His warmth of heart was such as those only who knew of his many unobtrusive acts of kindness could thoroughly appreciate; and more than one medical man could gratefully testify how, amidst the toils of a large practice, he would daily travel many miles to attend a professional brother or his family on a bed of sickness. If anything else were needed to prove the esteem in which he was held, it was the deep and sincere grief shown in the faces of all, professional friends and patients alike, who attended, in large numbers from far and near, at his funeral to pay the last tribute of regard to one who was so beloved.

Dr. Ray was born at Clare, in Suffolk, in 1817, and was educated at Mercer's School, in the City of London. At fifteen he was apprenticed to Mr. Gilbert, of Norwich. In that city he attended the practice of the Norfolk and Norwich Hospital, and there, on account of his love for ophthalmic surgery, he attracted the attention of the younger Dalrymple.

He subsequently studied at Guy's Hospital, where in 1838 he received the prize given to the student who had most distinguished himself in Midwifery; and having obtained his legal qualification in 1839, he commenced practice at Dulwich. Here he worked his way into an extensive practice. In 1849 Edward Ray became F.R.C.S. of England, and in 1862 M.D. of St. Andrew's, first in honours. He joined our Society in 1859. At the time of his death he was President, in succession to Dr. Barlow, of the Sydenham District Medical Society; he had likewise served on the Councils of the Pathological and Obstetrical Societies, and on that of the Medical Benevolent College. He was also District Medical Officer of Dulwich. That his contributions to medical science were not commensurate with his large experience is to be regretted. It should, however, be remembered that he wrote a valuable paper "On Placenta Prævia," read before the South London Medical Society, also one "On Infantile Umbilical Hæmorrhage, occurring after the Separation of the Funis." In conclusion, let me say that the untiring energy, unremitting attention, and thoughtful kindness to his patients, rich and poor alike, which so pre-eminently distinguished Dr. Ray in the discharge of his professional duties, his readiness at all times to proffer his aid to his brother practitioners in any emergency, the cordiality with which this aid was accepted by them, and the confidence which he inspired, are gratefully acknowledged. His moral worth could only be known to those who had the pleasure of an intimate acquaintance with him. But the distinguishing features of his character were his complete simplicity, his perfect love of truth, his self-denying devotion to his professional duties, and his determination to do always what was right, regardless of consequences. Such was the character of Edward Ray; he has died in the full enjoyment of all that this world can bestow upon a surgeon in general practice—far too soon, however, for his family, and also for his friends, by all of whom his memory will ever be held in the most affectionate remembrance.

The pathology of the disease which caused his death is one

of rare interest; time and opportunity forbid my placing before you the remarkable details which you will find reported in the 'Lancet,' March 7th, by Drs. Gull, Wilks, and Bright. I may state, in short, that Dr. Ray died immediately from endocarditis and pyæmia with embolism, having its origin in the centre of the circulation instead of at the circumference, and in a clot attached to a sac connected with the mitral valve of the heart. The disease hence affected the arterial system, instead of, as is far more common, the venous system.

Dr. Ray had been confined to his room for nearly two months before his death; for twelve years he had been the subject, but without any marked constitutional disturbance, of a loud cardiac murmur, most audible opposite the apex of the heart, of which murmur the condition of the mitral valve, discovered at the autopsy, afforded the explanation.

Dr. Ray has been succeeded by his eldest son, who had already been associated with him in practice, and who was formerly a House-Surgeon at Guy's Hospital.

The next name among our deceased Fellows is that of John Hasledine Tutin. He practised at Ripon, in Yorkshire, and was Surgeon to the Ripon Dispensary, also Coroner for the Liberty of Ripon. He was educated at, and was an Associate of, King's College, London. He became a Fellow of our Society in 1863, and died at the early age of 35, July, 1867, but his death was not reported to us till recently.

George Wise Mackenzie, of Thetford, Norfolk.—He was Medical Officer of the Thetford Union. He had been educated at St. Bartholomew's Hospital. He took the M.R.C.S. of England in 1848 and L.A.S. in 1851; he was elected Fellow of the Obstetrical Society in 1862. He died March 21st, in his forty-third year.

John Hodgson Ramsbotham, M.D., M.R.C.S. of England, and L.A.S.—He resided latterly at Park Place, Leeds, but practised formerly in the eastern district of London, and then was one of the Surgeons to the Royal Maternity Charity in that district. He was educated at the London Hospital.

The mention of this name recalls to our memory that of the physician who gave that name the great reputation it will long continue to hold in the profession, and who has also, not many months ago, finished his earthly career. That the professional life of Dr. Francis Ramsbotham was eminently useful must be candidly admitted. Although not a Fellow of this Society, it cannot be unbecoming in us to refer to him; indeed, I think it would be unworthy of us to pass by in silence the name of one to whom many of us—indeed, a large section of the obstetrical practitioners of this country —owe so much; of one whose work, entitled 'Obstetric Medicine and Surgery,' as a model of valuable clinical experience, stands unrivalled, and must long continue to be referred to as an important authority. Dr. Francis Rams botham graduated at Edinburgh in 1822, became a Member of the Royal College of Physicians in 1826, and F.R.C.P. in 1844. As successor to his respected father, Dr. John Ramsbotham, also the author of an esteemed clinical work, he enjoyed for many years in the City of London a large and lucrative practice, and was extensively consulted by his professional brethren on the difficulties of their midwifery practice. For several years he held the office of Physician-Accoucheur, and Lecturer on Midwifery and the Diseases of Women and Children and Forensic Medicine, at the London Hospital, where he had been educated; also that of Physician of the Royal Maternity Charity, in its populous eastern district, now superintended by my colleague Dr. Barnes. In his latter years Dr. Ramsbotham had retired from the active practice of his profession and resided at Cambridge with his son, a fellow of his college at that university.

After a succession of severe domestic afflictions, which made serious inroads on his health, Dr. Ramsbotham died at Perth, in Scotland, on the 7th of July, at the age of 67.

John Stewart Lamb, M.D. Edin.—He resided at Windsor Terrace, Maida Hill. He became a Fellow of our Society in 1862, and died October 10th, 1868, aged forty-six.

John M. Pagan, M.D. of Edinburgh.—He was Professor of Midwifery in the University of Glasgow. He was born in

1802 at Halglenmuir, an upland Ayrshire district of Scotland, and was the only son of the late Andrew Pagan, a large sheep farmer, who had latterly acquired the property of Boghill, in Lanarkshire. Having completed his school education young Pagan entered at Edinburgh, where he graduated in 1823, when 21 years of age. In 1825 he commenced practice at Preston, in Lancashire, and in 1827 settled in Glasgow, where he was admitted a Fellow of the Faculty of Physicians and Surgeons, and appointed one of the Surgeons to the Royal Infirmary. He was then held in high esteem as an expert and skilful surgeon, and up to the period of his death continued to be one of the directors of the infirmary appointed by the college. For some time he lectured on forensic medicine, and in 1840 published a suggestive and interesting volume on the 'Medical Jurisprudence of Insanity.' In the same year he was appointed Regius Professor of Midwifery and the Diseases of Women and Children to the University. He was in 1860 elected President of the Glasgow Medical and Chirurgical Society, and in 1863 he was elected Honorary Fellow of the Obstetrical Society of London. As a professor Dr. Pagan was distinguished for his facility of expression, as well as for his aptitude for happy illustration; and there are few practitioners in the west of Scotland who have not pleasing recollections of those lectures, or who cannot speak of the valuable lessons and suggestions they derived from his experience. In the University Lying-in Hospital and Dispensary he took much interest, and it was on account of his decided views, with regard to the origin and spread of puerperal fever, that the lying-in wards which at one time were associated with this charity have been for many years wisely discontinued ; and the labours, about 750 yearly, have been ever since attended at the patients' own homes. Dr. Pagan held the opinion, now becoming more generally entertained in this country, that if such institutions were to receive patients at all they should be constructed on the system of separate cottages.

From youth upwards Dr. Pagan had been a diligent reader of professional and general literature, to the last endeavour-

ing to keep pace with the advances of his profession. His practice as a physician and surgeon was extensive, and he was much employed as a consulting physician, more especially in obstetrics. Much is it to be regretted that Dr. Pagan has left us no record of the large experience which it is known he had enjoyed through the confidence placed in his judgment by his professional brethren. I should, however, not omit to mention that there is a form of obstetric forceps which goes by his name.

These forceps were introduced by him many years ago. They have very long blades, have no pelvic curve, and were especially designed by Dr. Pagan for grasping the child's head when unduly elongated.

Dr. Pagan, while enjoying the uniform confidence of his patients, who still cherish his memory, displayed an energy and decision in his manner which seemed at times to assume the aspect of severity, yet at heart he was truly kind and gentle, and many touching anecdotes are told by patients in illustration of this trait in his character. The illness which caused his death seemed to have first set in some years ago, when he was overtaken by a severe malady affecting his digestive organs, but from this he recovered sufficiently to resume his practice. Last spring, however, coincident with the serious illness and death of his wife, his old complaint returned. In spite of all that skill could suggest, his disease increased in severity, and, after much suffering, he gently breathed his last on the morning of the 19th of May, in the sixty-seventh year of his age (see a memoir which appeared in the new 'Glasgow Medical Journal').

Having performed this tribute due to the memory of our deceased Fellows, let us next pass to the consideration of the present position of our Society as regards its finances. You have received, from our Treasurer, an account of a considerable expenditure of our funds, so that our balance, after paying all claims upon us to the present date, is reduced to £50. We have, however, as you have heard, a satisfactory account of the manner in which the money has been laid out,

viz. in the establishment of a well-appointed Obstetric Library and Reading-room, with the necessary arrangements for the proper display of our Museum of Obstetric Instruments and other property, at 291, Regent Street; and I trust that those who have already frequented the Library will make its locality and its excellent accommodation and usefulness more extensively known, so that other Fellows, who may not yet have resorted to it, may profit by so doing. Let me hope, also, with all due acknowledgment to the generosity of many Fellows, that our Library will yet receive many donations of works from time to time, and that all the Fellows will feel a common interest in contributing their best efforts to increase its value and usefulness, by the presentation of modern and also of old works of good reputation, as also of obstetric instruments not yet in our collection. Since our last meeting we have, indeed, to acknowledge a gift from Dr. Matthews Duncan, of his Cephalotribe.

In response to a suggestion of my predecessor in this chair, we have now arranged upon our walls, or deposited in our photographic album, numerous portraits of British and Foreign Fellows of our Society. Of these latter we now possess the portraits of the following:

Walter Channing, M.D., late Professor of Midwifery in the University of Cambridge, Boston, U.S.

F. C. Faye, Professor of Midwifery in the University of Christiania.

Professor C. Hecker, of Munich.

Theodor Hugenberger, M.D., St. Petersburg.

J. Lazarewitch, Kharkoff, Russia.

Pietro Lazzati, Milan.

Edward Martin, M.D., Director of the Institute for Clinical Midwifery at the University, Berlin.

F. W. von Scanzoni, M.D., Professor of Midwifery, Würzburg.

Francesco Rizzoli, Bologna.

J. Marion Sims, M.D., late Surgeon to the Women's Hospital, New York.

Rudolf Virchow, M.D., Professor of Pathological Anatomy in the University of Berlin.

And I would ask of those Fellows, both British and Foreign, who have not yet contributed their portraits to lose no time in forwarding them to our Honorary Librarian.

If we were to record the contributions of the session which has just terminated, we should, I think, have no reason to feel otherwise than gratified. We have had, as appears to me, during the past year, most agreeable meetings socially, and we have had papers brought before us of great interest and value, followed by no less interesting and valuable discussions. As these will soon appear at length in our volume, I need not now trespass upon you in regard to them. I will only remark, by way of inference, that as during the ten years which our Society has now passed through since its establishment, there has been no want of papers of good quality, I think we have a reasonable guarantee that we shall have no lack of a steady supply of valuable materials in the coming session. Indeed, our department, as all others in every branch of medicine, no less than in every other branch of human knowledge, will, for all time, be ever receiving fresh accessions of knowledge, as our more enlarged experience and increased powers and means of observation shall place that knowledge within our reach.

But for the better fulfilment of what should be our earnest ambition, to make the advance of our department as steadily progressive as other departments of medicine, it behoves our Society, which comprises representatives from all the hospital schools of London, to use its best efforts to increase the facilities for a more complete training of the student in all the departments of a thorough obstetric education than is now provided for. Now, with this object in view, there should be appointed to the General Medical Council, which, so far, is not the case, a special representative of the obstetric interest. It is true that the General Medical Council have already shown a desire to receive information from the obstetric lecturers as to what they consider indispensable regulations for effectual teaching. And,

pursuant to an application from that Council for such information, a meeting of the lecturers from all the hospitals of London was held, in October last, in our Library, to consider and reply to the inquiries from the General Medical Council, and earnestly do we hope that this application from that Council will be the inauguration of good to follow.

I have next to remind you that during the past year an important question, which was suggested to us by Dr. Farr, of the Registrar-General Department, has been under the consideration of a Special Committee of our Council, and that Committee have drawn up and circulated among the Fellows a series of printed questions on the causes of the great mortality among infants, especially among those newly born. From the earnest co-operation of our Fellows in different parts of the British dominions, we shall hope to receive replies containing valuable information, which may guide us to a solution of this momentous question, so that we may be in a better position to suggest a remedy.

In the course of our ordinary meetings during the year we have had, amongst a variety of interesting discussions on subjects brought before us, one which yields to no other in point of importance—that of puerperal fever, its sources, its varieties, its most judicious treatment under the various circumstances of its occurrence, and on the more important question still, of its preventive treatment—which I hope will not fail to enlist our renewed and earnest consideration.

But time reminds me that I must not trespass further upon your indulgence; I will, therefore, conclude what I have to say in performance of my last duty as your President, by thanking you, which I do most sincerely, for the indulgence and courtesy which you have shown me during my term of office, and, at the same time, I offer my best thanks to our two Honorary Secretaries, whose valuable services I am glad we shall retain during the next session. Our thanks are also due to our Honorary Librarian, as well as to the other officers, including our Local Secretaries, for their never-failing services in furthering the prosperity of our Society.

I now resign the chair to my successor, who, in addition to

his contributions at our meetings, it is well known officiated as one of the first two Secretaries under our first President. He was also much engaged with our Founder in working out the details connected with the institution of the Society. Dr. Hewitt, therefore, may reasonably be expected to feel a strong interest in its welfare, and to exert his best efforts to promote its continued success.

On the motion of Dr. SEDGWICK, seconded by Dr. MARTYN, a cordial vote of thanks was given to the President for his valuable address.

FEBRUARY 3RD, 1869.

GRAILY HEWITT, M.D., President, in the Chair.

Present—34 Fellows and 8 visitors.

Mr. W. H. Lydall and Mr. B. E. Spaull were admitted Fellows of the Society.

Mr. W. Ross Jordan, of Moseley, Birmingham, was declared admitted.

The following gentlemen were elected Fellows of the Society:—T. R. Adams, M.D., Croydon; Robert S. Cross, M.R.C.S., Petersfield; Joseph M. Dempsey, M.D., Charterhouse Square; Joseph Moore, M.D., Bermondsey; Selby Norton, M.D., Putney; Henry S. Shaw, M.R.C.S., Louth; Henry Murray Steele, Holloway; Charles P. Tomkins, M.R.C.S., Croydon, and John S. C. Yule, M.R.C.S., Bury.

The following gentlemen were proposed for election:—Dr. Jas. Brisbane; Mr. W. Cunningham Cass; Dr. W. Farquhar, Dr. Sidney Hayward; Mr. W. H. Morgan, Mr. Barnard Spaull, and Mr. R. D. Thompson.

PRESIDENT'S ADDRESS.

GENTLEMEN,—My first duty on taking this chair as your President is to convey to you my thanks for the distinguished honour you have conferred in electing me to that responsible office. I beg to assure you that I am deeply penetrated

by this expression of your sentiments towards me, and I thank you most sincerely. The interests of the Society have from the first day of its existence been a prominent object of my thoughts and attention, and it has been to me a source of the deepest gratification that its success has been so complete, and its prosperity so increasing, as to be almost unparalleled in the history of scientific Societies. You may be assured that in this my new relation to the Society no effort shall be wanting on my part to further its advancement, and I beg you to believe that I estimate—I trust sufficiently—the extent of the responsibilities attaching to the office. My distinguished predecessors in this chair have left behind them examples which I shall, to the best of my ability, emulate, hoping that you will extend to me your kind indulgence and assistance in my endeavours to conduct the affairs of the Society in a fitting manner.

We have every reason to congratulate ourselves, gentlemen, on the present condition and on the future prospects of the Society. As a school of obstetric medicine it has exercised, and will continue to exercise, a powerful influence. The teaching of the Society I cannot but regard as one of its most important functions; and, looked at from this point of view, it cannot be doubted that its existence has been most beneficial. Perhaps no department of medicine was so much in need of a cohesive medium as that for the cultivation of which this Society was specially instituted. The practical study of obstetrics is beset with difficulties, and owing to this and other causes the department is one which had not in this country been cultivated to the same extent as other branches of medicine. In numerous distinguished exceptional cases the science received its proper share of attention, but the medical community at large had not thoroughly studied it. The practice was inspired too much by imperfectly understood traditions of the past, which were slavishly followed, and yet hesitatingly and distrustfully obeyed. Accordingly, when this Society was formed, it at once received the support of the profession, and from all quarters we received gratifying communications on the subject. For ten years

the Society has now flourished, and during that time has more than fulfilled the anticipation of its founders. It has formed a centre and bond of union for obstetric practitioners throughout the country. We have become, as the 'Transactions' will testify, the depository of the carefully obtained experience of eminent observers in, it may be truly said, all parts of the world. Many of these facts and observations would probably have been unknown and uncommunicated to the profession but for the opportunity offered by this Society. The discussions which have taken place at our meetings have contributed, we cannot say how much, to the mutual improvement of those who have taken part in them, to the dissipation of prejudice, and to the discovery of truth. Opportunities have been given for the ventilation and sifting of new theories. New facts have been communicated; on many occasions old facts have been presented with new and improved faces; while we have had the satisfaction of knowing that the advantageous effects of these our proceedings have not been limited to members of this Society, but have been participated in and shared by the whole profession. At home and abroad the success of our efforts to elevate and improve the practice of obstetrics, and the kindred subjects, those of the diseases of women and children, have been most fully and cordially acknowledged. Few of those who have been in the habit of frequenting our meetings will hesitate to confess their obligations to it in one form or other. Engaged in a common work, pressing forward for the same end, it is both pleasant and profitable to hear the opinions of others, to experience their sympathy in our difficulties, and to receive their congratulations on our successes; for, however we may look to the public at large for substantial rewards, it is very certain that no pleasure is so great or so unalloyed as that which we experience in the deserved applause and appreciation of our professional brethren.

The good work of this Society will, as we all must hope, continue. *Ars longa, vita brevis est.* The necessities for its work will long outlive our time, and humanity will doubtless be under still further and deeper obligations to it for

services rendered both in the saving of life and in the mitigation of suffering.

I think it well now, gentlemen, to refer for a moment to a matter which has an important bearing on obstetric science and on obstetric practitioners. I mean that relegation of obstetric practice to another, I will not say inferior, order of practitioners, which has been advocated in certain quarters. In the interests of our science, and not less in the interests of the public, we cannot refrain from taking a decided position in this matter.

The practice of obstetrics requires education, high mental training, and a wide range of medical knowledge, not less than tact and judgment. Physical strength and fortitude also are qualities which cannot be dispensed with. In the skilful obstetric practitioner we find a physician as well as a surgeon. Nature is ordinarily equal to the accomplishment of the parturient process, but we all know how much care and skill are required when nature fails in her operations, and how thankfully and appreciatingly the patient welcomes the means of relief from her troubles. The simplicity of the natural process has induced the belief in some quarters that for this department of the profession the midwife only is required. The fact that all goes so smoothly in the majority of instances lends support to this fallacy; but we, who know how unexpectedly difficulties sometimes occur, requiring great skill in order that they may be surmounted, do not trust our own wives and daughters in any but skilful as well as practised hands. It may be a matter of opinion, but I cannot refrain from expressing my belief that the great emergencies of obstetric practice can never be adequately met by anything short of masculine intelligence. Undoubtedly the requirements of the community are greater than we can at all times and in all places supply, and therefore midwives must, under many circumstances, be necessary; but it is certain that a skilful medical man will be always sought for when a real difficulty occurs. Another phase of this question also must not be lost sight of. The employment of midwives, many of them quite unskilled and

uneducated, has been productive of evils with which we are all too familiar. It is indeed a question whether it be not the duty of this Society to take steps for obtaining some legislative enactment to check the licence which exists in this particular. We have no desire to dictate to the public concerning a matter wherein, in the long run, their own judgment is pretty certain to be right; but it is assuredly our duty to let it be known in some tangible way that we do not consider it right or safe that the practice of midwifery should, under any circumstances, be allowed to be undertaken by individuals without credentials of any kind, often possessing not the smallest knowledge on the subject. How far, and in what way, it behoves the Society to move in this matter I am not at this moment prepared to say; for the subject is one requiring careful consideration.

Mr. Sass exhibited an anencephalous fœtus, the vessels of whose umbilical cord broke up into five divisions before reaching the placenta.

Mr. Chambers exhibited to the Society an uterine fibroid. He said that as so many specimens of the uterine fibroid have been before the Society from time to time, he should not have troubled the Fellows of the Society, on the present occasion, did he not believe that the specimen now exhibited possessed some points of special interest. In the first place it illustrated beautifully the three divisions into which uterine fibroids are divided—sub-mucous, intro-mural, and sub-peritoneal; and in the second place the difference between the fibroid proper, the white fibroid, and the fleshy or red fibroid.

The lady from whom the specimen had been removed was a widow, æt. 50, had been married thirty years, but had never been pregnant; she had enjoyed good health up to the year 1867. In the early part of that year she noticed that her menstrual discharge became much increased, extending from five to fifteen days; she consulted her physician, and he was of opinion that it was due to the change of life together

with the extra exertion occasioned by close attention on her invalid husband.

In the autumn of 1867 she came to England, hoping that the change and rest would be sufficient to meet her case, but this was not so; the menstrual discharge became considerably augmented, extending often to twenty days, oftener more.

Mr. Chambers saw this lady in May, 1868. On making a careful examination he diagnosed the case to be one of intra-uterine fibroid. The sound could be easily passed six inches, the fundus uteri could be felt extending to midway between the pelvis and umbilicus.

In addition to the enlarged uterus, a second tumour was found in the abdominal cavity; it was about the size of a double fist, freely moveable and attached to the fundus uteri. The patient declined to submit to any treatment; she left London, and took up her abode at Wimbledon; her general health improved, but the discharge continued, and the abdomen rapidly enlarged. In November, 1868, she took cold and was suddenly seized with severe pain extending over the whole of the abdomen. Dr. Payne (of Wimbledon) was called in; he diagnosed the case to be one of ovarian tumour, with general peritonitis. She passed through the attack pretty well, but was considerably reduced in strength.

Mr. Chambers saw her again on December 23rd, in consultation with Dr. Payne; the object of the consultation was to determine whether any operative means could be adopted for her relief. Her condition had materially changed since.

Mr. Chambers saw her in the previous May.

The measurement of the abdomen was as follows, viz.: Round the body at the umbilicus 56 inches; from the ensiform cartilage to the symphysis pubis 25 inches; from the right anterior superior spine of the ilium to the pubis 19 inches; left side 16 inches. There was great difficulty in respiration from pressure on the diaphragm; anasarca in both legs extending to the knees, and her last menstrual period, just over, had extended to thirty days.

Under such circumstances an operation was out of the question. Mr. Chambers saw the patient again on January

6th, 1869. Her condition was in every respect worse; large patches of gangrene extended over both legs. She died on 9th January.

A post-mortem was made twelve hours after death, by Dr. Payne and Mr. Chambers. On opening the abdomen a large fibrous tumour was found to occupy its cavity; it was closely adherent to the abdominal wall over its whole extent, as well as to the bladder and descending colon. It had a vertical measurement of fifteen inches, and a transverse measurement of twenty inches; it was attached to the fundus uteri by a short thick pedicle, through which travelled several large blood-vessels, some of them large enough to admit a quill.

On attempting to break down the adhesions between the tumour and descending colon, the peritoneal covering of the tumour was accidentally torn through, and an enormous quantity of pus escaped; this was quite unexpected, as no fluctuation could be detected during life, by the most careful examination. The quantity of pus was estimated to be about ten or twelve pints; on making a section of the tumour it was found to be a white fibroid in a state of degeneration, and divided into innumerable cavities or sacks having a honeycomb appearance, each cavity or sack being quite distinct from its neighbour, thus explaining the difficulty, indeed the impossibility of detecting fluid during life. A portion of the tumour was removed and has been carefully examined by Mr. Francis Mason, who is of opinion that it is malignant.

The more interesting points in this case are—

1st. The very rapid growth of the extra uterine fibroid tumour, hereby setting up the greatest possible difficulties to the formation of a correct diagnosis as to its precise nature; and

2nd. Its malignant character, as "it is now generally admitted that such a degeneration never occurs." (M'Clintock.)

FIBROID DEGENERATION OF UTERUS, WITH SUB-PERITONEAL AND INTERSTITIAL FIBROUS TUMOURS, IN A STATE OF DISINTEGRATION.

By Arthur W. Edis, M.D., M.R.C.P.,

ASSISTANT-PHYSICIAN TO SOHO SQUARE HOSPITAL FOR DISEASES OF WOMEN; HONORARY PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL.

The subject from which this tumour was removed post-mortem was æt. 50; married twenty years; never had any children; she came under observation in June, 1867, suffering from symptoms of pelvic obstruction.

On inquiry I ascertained that during the last ten years she had been suffering from constant discharge of blood per vaginam, never having been clear from it for a single day, though at times it was much augmented in quantity. The catamenia appeared first at the age of fourteen, and were profuse at each period. For many years past, but more especially in cold weather, she suffered from "weight and bearing down pain" but had no dysuria or obstruction of the bowels.

In June, 1867, owing to there being great difficulty in defæcation and dysuria, I attempted to press the tumour up above the pelvic brim, and succeeded so far as to relieve considerably the urgent symptoms, putting her at the same time on the bromide of potassium and ergot with cinchona.

In July, 1867, she reported herself as greatly relieved, the discharge of blood was much less, more watery in character and lighter coloured; the patient herself more lithe and active, and her health much improved.

In August, 1867, after severe exertion, considerable pain with increased hæmorrhage ensued, and subsequently she experienced the sensation of a cold heavy weight at the lower part of the abdomen.

In October, 1867, after having taken quinine and iron for some weeks, her health had very much improved, and the hæmorrhage was very slight, sometimes absent altogether.

In April, 1868, symptoms of obstruction having again appeared, I employed pressure as before; slight peritonitis ensued, but was relieved by rest and opium.

In October, 1868, her health began to give way, she had a considerable amount of pain over pubic region, frequent sickness; dysuria; œdema of left leg; cramps, muco-purulent discharge per vaginam; feverishness, &c. These symptoms were somewhat relieved by means of opium and other palliative measures, but she became very cachectic and emaciated, and on December 25th, 1868, she suddenly expired, during the last few weeks of life urgent sickness with increased discharge having been the prominent symptoms.

At the "post-mortem" the intestines were found matted together by old adhesions, a quantity of serous fluid being also present.

The uterus itself was about the size of a large cocoa-nut; on the posterior wall of the fundus was a sub-peritoneal fibroid tumour in a state of calcareous degeneration, within the wall was another much larger fibroid in a state of sloughing and disintegration, the whole interior of the uterine cavity was in a state of slough, the surface being covered by a thick viscid muco-purulent secretion, like pus after the addition of liquor potassæ.

It was a good exemplification of fibroid degeneration of the uterus, the walls being at least an inch thick, together with sub-peritoneal and interstitial fibrous tumours.

CASTS OF THE HEAD OF AN ANENCEPHALOUS FŒTUS, WITH DESCRIPTION OF THE LABOUR.

By Dr. Carlyle, of Carlisle.

The casts which are now shown to the Society are those of the head of a male child born at full time.

When I saw the case the mother had been in labour about three hours. The pains were regular and frequent. The liquor amnii had been discharged some time. On making an

examination the os uteri was found dilated to about the size of half-a-crown; the presenting part consisted of a fissure traversing the right oblique diameter of the pelvis bounded by two soft fleshy prominences resembling to the touch nates or labia. As the dilatation progressed, passing the finger forwards along the fissure towards the left groin it entered a deep circular opening feeling like an anus or vagina.[1] On further examination towards the left acetabulum I found an ear, which I succeeded in determining to be the left and very small. My attention being awakened to some peculiarity in the case I proceeded to examine further, and found towards the right sacro-iliac synchondrosis something like two eyes, with a slight prominence between. At this stage the case was a very puzzling one; it presented the following peculiarities: the longitudinal fissure in the right oblique diameter bounded by its two irregular prominences; anterior to this, the circular opening, to the left of the fissure and higher up an ear (the left), at the opposite end of the fissure from the circular opening two bodies feeling like eyes. In a little time, as the labour progressed, other features of the face came within reach—a nose slightly prominent, and a mouth with long and highly arched jaws, convincing me that the presentation was a head, one with some cranial abnormality, but one of deficiency not excess. The labour terminated favourably in about two hours after my arrival. The child was living, and, so far as the body was concerned, was that of a fine full-time infant. The head was characterised by absence of the integument, bony calvarium, and dura-mater, leaving the brain exposed, covered by pia-mater which was of a deep claret colour: the cerebral lobes could be separated, exposing the corpus callosum, the finger could be introduced between the cerebrum and cerebellum; the under-jaw was projecting, and the roof of the mouth highly arched. The child lived three days, uttered a peculiar whining cry, unlike that of a healthy child; it took food which it swallowed easily, passed water but had no motion from bowels. Before the child died the cerebral hemispheres became slightly

[1] This was the fissure between the cerebrum and cerebellum.

adherent from effusion of plastic lymph. The friends prohibited all inspection of the body, and with difficulty gave consent to allow a cast to be taken, carefully watching us during the process. The father and mother were both healthy. Nothing occurred during gestation to frighten the mother or lead her to suspect that any mark or deformity would be present on the child. When born she never even inquired if it was all right.

Its father had been the subject of a congenital hare-lip, for which he had been operated on. In the limited number of books at my command I have not been able to meet with a similar case, and very much regret that from the same cause I am unable to enter into the literature or etiology of this and similar cases. It is also much to be regretted that permission could not be obtained to make a careful examination of the head and the existing bones.

I am indebted to my friend Dr. McLaren for the casts taken. Owing to the softness of the tumour the parts are a little flattened and displaced by the pressure and contraction of the plaster of Paris.

NOTE.—This was the mother's first labour. She has since been delivered of a second child (in July, 1869), twelve months after the case above recorded. This child has a small harelip; it is otherwise healthy and well formed. A case somewhat similar to the above has been pointed out to me in Smellie's 'Midwifery.'

TWINS, TOGETHER WITH SECUNDINES FROM A CASE OF HYDROPS AMNII.

Under the care of Dr. GRAILY HEWITT, at University College Hospital.

(Reported by Mr. WILLIAM HODGSON, Obstetric Assistant at University College Hospital.)

Mrs. C—, æt. 40, married twenty-one years.

Father died at sixty, of dropsy, mother died at seventy

Since marriage has not been in such good circumstances

as formerly; health not as good for last twelve years; catamenia began at sixteen; five years ago stopped for nine months, at end of which time she had a three months' miscarriage; was poorly once, and not again for eight months, this she thinks was caused by grief.

She has had ten children, the last twelve months ago, and five miscarriages, last four years ago; some of the labours were rather tedious, the last a very good one; has felt a weakness in back since then; usually suffers much from derangement of stomach when pregnant; was told fourteen months ago by her doctor that her liver was diseased: for last twelve months has been caused a great deal of trouble and anxiety through the sudden disappearance of her son.

Patient says she is now about six and a half months advanced in pregnancy; has all along noticed her stomach being much larger than she thought it ought to be; has increased in size rapidly during last month, her breathing becoming more and more difficult; for last two months has had slight cough; for last fourteen days or so, the legs have been much swollen.

Felt fœtal movements on *left* side up to a fortnight ago, since then on *right* side; cannot tell whether she felt them at *right* side previous to that or not.

Breasts painful and enlarged up to a fortnight ago, have since been easier and rather less in size.

Urine of late scanty and high coloured, passing it frequently, and very little at a time.

Locomotion difficult, causing great dyspnœa.

Has been able to take but little nourishment of late.

On admission.—Patient thin and very anæmic; palpebral conjunctivæ and lips pale; has a care-worn look; feels very weak; lies on back with difficulty, with more ease on one side with legs drawn up; respiration 20 per minute, husky, laboured.

Appetite bad, cannot take solid food; great thirst; tongue coated with thick white fur; bowels of late obstinately constipated.

Skin hot and perspiring.

Abdomen enormously enlarged measuring fifty-four inches in circumference; rather prominent in front; symmetrical; umbilicus pushed out, hard and tense to the feel everywhere; uterus cannot be made out.

Percussion.—Absolute dulness over whole front, both flanks resonant, more so on right side than left, also for an inch or so below ensiform cartilage; fluctuation present whenever dulness exists.

No fœtal heart sounds to be heard.

Per vaginam.—Uterus much enlarged, very tense and resistent on pressure. Os uteri closed; cervix absent; no ballotment to be had.

Pulse quick and weak.

Skin hot and dry; tongue covered with a white fur; legs very œdematous, pitting on pressure.

Dr. Graily Hewitt, having carefully examined the patient, expressed the opinion that the case was one of enormous collection of liquor amnii, and that the fluid was wholly within the uterus.

Treatment.—The treatment Dr. Hewitt proposed to adopt was to keep the patient quiet for two days, to improve her general health by careful feeding, and then to puncture the membranes with a fine instrument, so as to allow of the gradual escape of the fluid and give time for the uterus to recover itself and contract as it was emptied. Artificial mechanical interference was, however, unnecessary, for on the 14th, at 6 a.m., the membranes ruptured spontaneously. The flow of water was gradual throughout the day, and continued till 6 p.m.; the amount of fluid discharged was very considerable, drenching the bed and flooding the ward, relieving the patient much.

At noon next day labour pains set in, soon followed by slight hæmorrhage. On examination a bag of membranes was found presenting just within the mouth of vagina, a dose of ergot was given, and the bag ruptured, about twelve ounces of fluid escaping.

Almost immediately a dead fœtus was born, presenting with the feet. On further examination another fœtus was

discovered, presenting with the head, and in about ten minutes it was born alive, but died almost immediately, the cold douche and artificial respiration being tried in vain.

The placenta was expelled in about fifteen minutes, slight hæmorrhage followed, but by means of ergot and manipulation pretty good uterine contraction was obtained, the binder being afterwards tightly applied with compress.

The fœtus first born had apparently been dead some time, the skin being desquamated, discoloured, and shrivelled; length 11½ inches, weight fifteen ounces, eyelids not adherent, membranæ pupillares disappearing, nails imperfectly developed.

The second was fairly nourished, natural colour, length twelve inches, weight one pound fourteen ounces; in other respects much resembled the first.

The placenta was very large, circular in shape, about ten inches in diameter, healthy in appearance, and having two distinct bags; the bag of the live fœtus very much the larger of the two sacs, corresponding to the whole of the fœtal surface of the placenta.

The attachment of the cord of the dead fœtus was peculiar, dividing in the membranes into three large branches, and running in them for about the distance of twelve inches or more before they joined the placenta.

Pathology.—As regards the pathology of this rare disease I have but little to say, leaving it for those to discuss who are more conversant with the subject than I am.

So far as I can make out from reference a satisfactory explanation has not yet been come to.

I think it more than probable that the increased size of the abdomen noticed by the patient during the first 5½ months, to have depended upon the double fœtation.

The sudden and rapid increase in size was due probably to the death of the fœtus, but how I cannot say; perhaps, as Dr. Hewitt suggested, by the laws of exosmosis and endosmosis. Or might it not depend upon an impoverished condition of the blood, or a dropsical predisposition in the patient herself? Perhaps both combined.

M. Marcin considers it to be inflammatory.

Dr. Robert Lee quotes seven cases; in most of these the enlargement began at about seven months, in one as early as the third month, miscarriage taking place, or premature labour having to be induced, in from three to four weeks after. In five cases the fœtuses were dead or very feeble; five were accompanied with some malformed or diseased condition of the fœtus, or involucra; two were accompanied with inflammatory symptoms in mother; and in none were there the appearances produced by inflammation. Out of three cases related by Dr. David W. Davis one somewhat resembles the present one.

A lady, aged 28, of weak and lymphatic constitution, was seized in seventh month of her sixth pregnancy with dry and frequent cough, intense thirst, dryness, scanty and lacteritious urine, œdema of lower extremities, loss of colour, and sleeplessness. Soon afterwards the abdomen became hard, tense, painful, and much enlarged, respiration tight and laborious; patient being no longer able to rest in horizontal position. The waters were evacuated gradually, fourteen pounds being discharged, much to the patient's comfort.

The patient was delivered of a puny and feeble child at about the seventh month.

Of the other two cases the abdominal enlargement began in one at five months, shortly after fright; subsequently a great quantity of fluid was drawn off and the patient delivered of twins.

In the other case the enlargement of abdomen began in the fourth month, caused by fall and blow on epigastrium; six weeks later had walked excessively. Premature labour came on at six months, delivered of twins, the quantity of fluid being very great.

Is not the insertion of the cord of the dead fœtus peculiar? and may it not have had some influence in producing its death?

ON THE CEPHALOTRIBE.

By J. Matthews Duncan, A.M., M.D.,
LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN, SURGEONS' HALL, EDINBURGH.

In presenting to the Obstetrical Society of London a specimen of my cephalotribe, I wish to make a very brief statement of the reasons why I adopt this form of instrument.

Recent British cephalotribes always appeared to me, when I looked at them, as being very inappropriately constructed. They seemed ill-adapted to effect the crushing which was the purpose of their invention. They might effect some moderate amount of crushing and breaking, but their blades, when the instrument was closed, were so far apart, had so wide an interval between them, that the crushing must be imperfect, even supposing the instruments to act with mathematical precision, which they are very far from doing. These British cephalotribes are spoken of by an eminent, recent, English authority as being all that can be desired, while an equally eminent French authority says that it is useless to consider their operation, because, from their construction, they cannot be efficient. Under these circumstances, and as I occasionally use the cephalotribe, I investigated experimentally and otherwise the value of the British and French cephalotribes.

This investigation has led me entirely to coincide with the French authority just alluded to, and the result has been the production of the cephalotribe which I have now the honour to lay before the Society. It will be observed that it is, in the main, a reproduction of the French instrument. I retain all the chief characters of the Parisian tool. The changes I introduce are in the lock, which is, I think, simplified, being in my instrument a mere pivot with a broad top; in the screw, whose thread is made stronger; in the pelvic curve, which I have slightly diminished; in the handles, which I

have at once broadened and thinned. Besides these changes I have made others of less importance.

British cephalotribes I have found, as already said, to be so constructed as to be apparently not intended to crush the fœtal head completely, the blades of the closed instrument being far apart. But the blades are so long and flexible that, in practice, this fault is greatly increased. Any one making trial will easily satisfy himself that for cephalotripsy proper the British instruments are not to be compared, either in scientific construction or practical efficiency, with the French implements. Indeed, the British cannot possibly prove the value of the operation; a proceeding which will certainly now come to be tested in this country.

But though this is the case, the British cephalotribe, or some modification of it, may be found useful in cases of slighter deformity than those which demand all the advantages of a thorough cephalotripsy. It may be useful, and has been found of use, in many cases where its application was not demanded, but where it was found to be a convenient combination of the cephalotribe and crotchet.

Accoucheurs, who wish to discover what assistance can be gained in difficult labour from thorough cephalotripsy, must use my instrument or the French one, or some other equally, if not more, efficient in its working.

SOME REMARKS ON THE CEPHALOTRIBE.

By J. Braxton Hicks, M.D., F.R.S.,
LECTURER ON MIDWIFERY, AND PHYSICIAN ACCOUCHEUR, AT GUY'S HOSPITAL; PHYSICIAN TO ROYAL MATERNITY CHARITY; EXAMINER IN MIDWIFERY AT UNIVERSITY OF LONDON, ETC. ETC.

In a recent paper "On the Construction of the Cephalotribe," by Dr. Matthews Duncan, read before the Edinburgh Obstetrical Society, and published in the 'Edinburgh Review,' a comparison is instituted between the long-handled or French form, and the short-handled introduced by Sir James Simpson, with others of somewhat similar construction. He

has arrived at the conclusion that the latter bears no comparison with the former, principally because they are not strong enough to crush up the base of the fœtal head, which he had found the French one can do. The reasons of this weakness in the short-handled he has pointed out, and has altered the French instrument in certain points.

These observations are made with the well-known care of that eminent obstetrician, and to many of his conclusions I am prepared to give assent; yet it appears to me that, practically, there are some circumstances which have not been taken into account which must possess considerable influence with us when selecting the most generally useful variety of cephalotribe.

In taking Sir James Simpson's instruments for comparison he has taken the weakest of that form, and therefore many of his observations will scarcely, or only to a limited extent, apply to the stronger forms of short-handled instruments; yet this one, weak as it is in comparison with the ponderous Continental forms, has in it a power which, with a slight increase in size and slight alteration in the weak points, is sufficient for all practical purposes to deliver the head through a pelvis as small as it is possible to employ the French instrument in. If this be the case, and for the reasons mentioned below I think it is then the advantage of a small, handy, and portable tool over the unwieldy forms of the Continent will be sufficiently apparent to all. The weak points of the short-handled instrument have been well-indicated by Dr. M. Duncan. Each of them is capable of correction, without altering its general characters. Some of them I have already endeavoured to overcome in an instrument showed in this room two years ago; and the rest, I think, will be sufficiently fortified in the one now before you.

The difference between the former one and this is the greater depth of the shank and of the handles, which are left purposely broad to give a steadier hold in use than can be given to the narrow, long-handled kinds, and also a slight increase in length. With short handles we lose the advantage of the longer lever, but it has less spring; what, therefore, is

required in the shorter handles is a more powerful screw. This Dr. M. Duncan doubts we can obtain; but by the mode in which the one before you acts it will, I submit, be found to work without any strain on the hand, and its power can yet further be increased by lengthening the rays of the lever. In the form of its screw it differs from all, and agrees with that of Sir James Simpson's in the capability of its being almost instantaneously moveable, a point which, though not alluded to by Dr. Duncan, yet gives us much more convenience in the introduction of the blades, than when the screw is swinging at the end of the handle.

Now, the real differences between the French and Sir Jas. Simpson's cephalotribe (if we except the relative strength) is in, 1st, the shortness of the handles; 2nd, the curving-in of the ends of the blades, which are nearly parallel to the ends.

Regarding the *first* point, the remarks made above show how the difficulty can be overcome; if, then, we diverge the handles, say one inch apart at their ends, and increase their depth, we can produce the same results, *cæteris paribus*, as the long-handled instrument.

Now, as to the *second* point, namely, the sharp incurvation of the tips of the blades, this is done for two reasons—first, in order that the head may not slip from us when under the grasp of the blades, and, secondly, that when the blades have been approximated as much as possible, they may retain hold and be employed as a tractor.

Now, this slipping of the head is not unattended by danger, and, although possible to both instruments, yet much more likely to occur during the use of the long-handled one.

But this incurving will prevent the inside of the blades approaching each other to the extent to which those not so made are able. Still, if the points are not made to incurve too much, this disadvantage can be reduced to a minimum. In the instruments I formerly showed the distance within, excepting to within half an inch of the ends, did not exceed that of the French instruments, nor did the extreme external measurement exceed it, and yet the incurvation was sufficient to hold on in most cases.

Dr. Duncan objects that because of these curved points we cannot approximate the blades to anything approaching those of the French cephalotribe. That the blades of my instrument will approach very nearly as close as the French I have proved by many trials; and that instruments might be constructed which would even approach closer I can quite believe. But in practice do we really require such extreme crushing? Do we require the head to be crushed down to a sixth or seventh of an inch.

Let us suppose that even in three different portions of the transverse diameter we have crushed down to that extent. It is certain that between each line of crushing the intermediate parts will remain prominent, to a considerable degree still unreduced. Again, after the blades have been removed the crushed head begins to expand to a really considerable degree, the extent of this expansion and its force depending upon the degree of ossification of the head. In some large heads I have found it equal to one inch in the biparietal diameter, and over the side of the face three eighths of an inch.

This after-expansion of the head in cephalotripsy is therefore an element of much importance; so that to again overcome it some force must be employed, either, in other words, the uterus must so compress it against the walls of the pelvis laterally, or traction by the crotchet or craniotomy forceps must be employed to the same end. If the cephalotribe be so made that it can draw down at the same time as it keeps up compression, this trouble would be overcome. By adapting the altered form of the head to that of the deformed pelvis the head would of course descend, provided the reduction was sufficient. That is, supposing the instrument to be brought down, so that grasping the head its external diameter at greatest width was two inches, and the pelvis in its anterior-posterior diameter two inches at middle and somewhat greater at the sides, say two and a quarter to two and a half, the head could readily descend if the transverse diameter of the pelvis were sufficient for the other diameter of the head. Supposing the conjugate lower than this, say one and a half, yet with the blades two inches outside

measurement, we might by evading the exact line of greatest contraction coax the blades through if the side loops exceeded two inches. If, however, the pressure were removed and the head expanded, say to two and a half inches, then we must trust to the uterus, the crotchet, or craniotomy forceps to reduce the head again to side of the pelvis.

But there is another question which must be put. If we are able to apply the cephalotribe, have we the power always of selecting the part on which we wish to fix the blades?

Doubtless we have this power of selection where the pelvis is not much reduced, but as it becomes more contracted in the conjugate diameter the less shall we be able to place the blades at will, so that in the majority of cases we should have to apply them in the transverse diameter of the pelvis whatever the position of the head. This being the case, and the child's longitudinal diameter being transverse, we should seize it, one blade over the frontal bone, the other on the occiput, probably low down. If the head were oblique we should seize it obliquely with a tendency in some cases to the transverse, especially if it so happened that the blades were not quite transverse, and the head so placed that its transverse axis were opposed to the obliquely-placed blades.

In the pelvis deformed by rickets we should have greater facilities for placing the instrument as we liked, but with the malacosteon pelvis the difficulty would be much greater, and proportionately to the degree of contraction at the outlet.

Therefore, if we are obliged to accept the position as we best may, there is evidently considerable uncertainty of seizing the head in its transverse diameter; and the reduction of the base in other directions by simple crushing is a matter of great difficulty, and requiring great power in the instrument.

And that brings me to indicate another mode by which the head may be reduced without crushing the base, at any rate, to any great extent.

We know the depth of the vertical diameter, by removing the calvarium, can be reduced down to one and a half or even to an inch according to the size of the head. If, then, we

bring the face to present we are able (as I have already re-advocated in this Society *) to draw down the head through a brim somewhat larger. Indeed, it is scarcely possible to suppose a case in which one would require a greater reduction than that, for two reasons, because, first, we should scarcely be able to manipulate in a pelvis of lower diameter, and, secondly, because the difficulty of abstracting the remainder of the child will be such as to be a more severe operation than delivering the head had been. Hence it will be seen that we can deliver the head without crushing the base, through a small space, and therefore we may assume that if the vault can be compressed down to a diameter equal to that when the vault is removed, then delivery can be as readily accomplished. Let us suppose a case of face presentation, in which perforation has been already done through the forehead; let us then apply the cephalotribe, one blade being placed beneath the lower jaw, the other on the line of the longitudinal suture. Upon the application of the screw pressure the vault would be compressed down to the inside of the base, and the lower jaw crushed in, the vertical diameter remaining, being only one inch and a half. The instrument having been reapplied to the other parts of the vault, and the pressure kept up during traction, the head could be drawn down through a space somewhat larger, supposing the transverse of pelvis was somewhat larger than that of the head.

Let us again suppose the instrument to have been applied in a vertex case, and to have seized the head in the manner of the long forceps, and obliquely over the orbit of one side, and the occiput of the other, low down towards the neck; when the pressure is exerted, the vault is crushed down with the base, reducing the vertical diameter to the minimum. Let the instrument be reapplied to complete the destruction of the vault, and traction and compression being made at the same time, we can draw the head through, vertex forwards, in much the same shape as when the face presented in the case above. But in drawing down we have more difficulties

[1] See 'Obstetric Transactions,' London, 1865, p. 263.

in the face, for not only is the lower jaw not damaged, but the thickness of the neck is added to it. Hence, this mode of crushing is not quite so advantageous as the first described; again, if we apply the blades in the transverse diameter, we shall be very seldom able to make their ends reach on either side equally. When the crush comes on the base it tilts beneath the pressure, and thus one blade frequently slips above the base, the other generally remaining below; and thus as the pressure is increased the temporal and parietal bones on one side are pressed in on the base, and the head thus flattened sideways to about 1½ inch thickness. By this means we shall draw down the head sideways. But as its long diameter is undisturbed, it will be opposed to the transverse of the pelvis.

By these three methods may the head be crushed down, without crushing up the base; and the force required will be much less than that required for crushing the base.

As far as my own experience is a guide, I am of opinion that in one of these three ways the largest proportion of heads is reduced; and that complete crushing of the base is the exception rather than the rule in actual practice. When we rely on the lateral crush, we shall have always the width of the face as an opponent to the antero-posterior diameter of the side loops, and as this requires a much greater force to destroy it than the base of the centre of the head, an instrument of great power is requisite. If we remove the instrument then the expansive power of these more solid parts takes place, and although this is not so extensive, yet it requires more traction force to overcome it.

Independently of the above considerations there is one other which is of some importance.

It will probably be admitted by every one, that if we can draw down the crushed head by the same instrument as that used for crushing, it would be better to do so, than to remove it in order to employ other kinds, especially when it is a sharply pointed hook that must be employed, or the craniotomy forceps, whereby risk of laceration is increased, and the difficulty of seizing the head again great.

It is doubted by Dr. M. Duncan whether the cephalotribe with a pelvic curve, which he considers necessary, will prevent the quarter turn being given to the flattened head, so as to adapt its new shape to the pelvic brim. As far as my cases have enabled me to form a judgment, this objection will be found to vanish in practice, indeed, the same objection has been given to the long forceps, but although it frequently rotates with the head, yet it is not the less efficient. The effect is to make the instrument straight instead of curved. However, the pelvic curve can be made less severe; so as partly to lessen this objection Dr. Kidd, of Dublin, has made one quite straight. The curve in the one before you is two inches.

There has been another objection to the use of the cephalotribe as a tractor, namely, that the thickness of the blades increases the bulk of the head. This is of course quite true so far; but when we take into account the after expansion of the crushed head, even brought down to three quarters of an inch, it will be found that the overcoming of this force will more than compensate for their thickness.

But it is said that Pajot's method of allowing decomposition to assist in the process largely overcomes the opposition to the delivery of the head. This was a plan once used in craniotomy, but now in a large measure avoided, though there are still some advocates for it. Pajot having crushed the head two or three times leaves the case for some time, perhaps twelve hours, and then, if none or not sufficient descent has occurred he again crushes it, leaving it for a time in order that softening down may help.

No doubt, as far as "cephalotripsy" is concerned, it is an advantage, but I cannot bring myself to think that any proportionate advantage can accrue to the patient. Prolonged pain, protracted uterine action, increased exhaustion and tendency to metritis is more or less the result.

And if the uterine powers alone are to expel the so-crushed head after the removal of the cephalotribe, then any form is far preferable which can bring down its outside diameter whilst holding on to one and three quarters or two inches is

sufficient to bring it at once away with no more pulling than required in the use of the forceps. This mode of Pajot's has been called "cephalotripsy proper." But why should we not call the other mode of crushing the same. It is merely a variety of the operation. The vault more particularly in one case is crushed, the base in the other.

But why in craniotomy should we allow the patient to wait until partial or complete decomposition comes on? Formerly, when blind pulling was the plan, the head was a great difficulty; but, now that the mode is improved, and that removing the vault and making the face to present we can almost to a certainty succeed in a very reduced pelvis; we have no reason nor excuse for waiting till the patient is exhausted, and the system is impregnated with deleterious gases—why not apply the same rule to the cephalotribe? Because, it will be answered, you cannot do it on account of the width of the blades in the tractor form. But, as before remarked, if the blades can in the stronger forms of tractors be brought sufficiently close, that they shall be better able to effect delivery than the uterus can, with the after expansion of the head to contend with. And, therefore, that these kinds are practically sufficient for those cases, where the operation is itself practicable.

But even if the short-handled instrument were not so strong as to crush the head sufficiently for the extreme cases of pelvic distortion; yet we are largely indebted to Sir James Simpson for placing in our hands an instrument of much value, and of more wide requirement than the stronger instruments. The ponderousness and unwieldly form of the French kind had done much to exclude it from British practice; and, therefore, we have hitherto worked with crotchet and craniotomy forceps. But now with a very handy and modest instrument, we are able to dispense with these latter to a great degree without risk of laceration, and the tedium of an operation which necessarily requires time to avoid the many chances of injuring the patient. Since I have begun to employ it after perforation, I have not had occasion to use the crotchet and craniotomy forceps, and am

confident that it has shortened the delivery by three quarters of the time these other instruments would have taken. That Sir J. Simpson's cephalotribe is scarcely strong enough I am ready to admit, but without much difficnlty it can be strengthened for all practical purposes.

But whether we use the long handled or short handled form it is doubtful to me whether craniotomy, conducted in the manner to which I have already alluded, will not reduce the head to smaller proportions, and enable us to deliver through narrow straights.

In the foregoing observations I have endeavoured to show that the diameter of the head can be reduced by other means than by lateral crushing of the base; that in a number of cases where the cephalotribe is used, the position the blades take upon the head is beyond our control; that in the majority, it will be found that the base tilts under pressure, and thus avoids the lateral crushing, and that then the vault is pressed in on the base; that this effects a reduction practically sufficient for delivery; at any rate sufficient if we still continue the compression during traction; and equal at least to the re-expanded head even crushed down by the strongest instruments. The force required for the crushing in of the vault is not so much as that required for the lateral crushing of the base and of the face. That although the power of Sir James Simpson's cephalotribe is scarcely sufficient, that of the Continental forms is more than enough. That the cephalotribe which can be used as a tractor is the best form; and that the use of the craniotomy forceps and crotchet will be materially lessened by the use of the cephalotribe after perforation both to the advantage of the patient and shortening the operation.

MARCH 3RD, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—44 Fellows and 5 visitors.

Dr. Rutherford Adams; Dr. J. Maldon Dempsey; Dr. Selby Norton; Dr. Charles P. Tomkins; and Mr. Henry Steele were admitted Fellows of the Society.

Messrs. H. S. Shaw and J. S. C. Yule were declared admitted as Fellows.

Dr. James Brisbane; Mr. W. C. Cass; Dr. W. Farquhar; Dr. Sidney Hayward; Mr. W. H. Morgan; Mr. Barnard Spaull; and Mr. R. D. Thompson were duly elected Fellows of the Society.

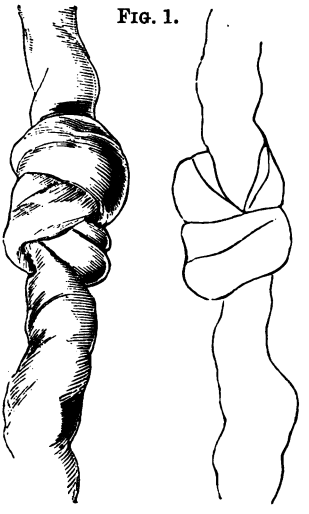
Dr. ROUTH exhibited a new Intra-uterine Pessary to correct deviations and to keep the canal patent after the use of the hysterotome. The instruments most in use—those of Dr. Greenhalgh and Dr. Meadows—had two common defects; first, being too long, and so pressing against the fundus, the part of the uterine cavity which bore pressure with least impunity; and, secondly, being too heavy. Dr. Meadows's glass pessary was most easy of application, and from the character of its surface gave rise to less disturbance, but it often fell out, and was not always retained *in situ*. Dr. Greenhalgh's did for a time keep itself *in situ*, but the lateral pressure it produced gave rise sometimes to severe hæmorrhage and to so much pain that it could not always be borne, and he had

had cases in which he had been compelled to withdraw it five minutes after insertion, although in some cases it answered very well. The instrument he now produced was made of ebonite, and was excessively light. Its shape was in keeping with the shape of that part of the uterine cavity in which it was to fit. That part of the cavity was not shaped like the letter V (as it ought to be to suit Dr. Greenhalgh's instrument), but like the letter Y, with the upper armlets somewhat concave, the concavity looking downwards. His instrument was constructed to fit this shape. Inferiorly there was a round disk, as in all uterine pessaries. The stem was made up of two parts, that lying between the external and internal os straight and like a quill, the straight inferior portion of the Y then divaricating into two very thin armlets with their convexity looking upwards. It was introduced with the armlets in apposition, exactly as Dr. Greenhalgh's, by a stilette. This stilette passed through a hole in the disk, and then outside the stem, not inside, as in Dr. Greenhalgh's. When the stilette was removed, owing to the spring the armlets separated and rested on the sides of the uterine cavity, so keeping the instrument *in situ*. The instrument had some resemblance to Dr. Aveling's, and yet was very different from it. So far as he had tried it he was very pleased with it, as it appeared to be borne very comfortably, and, in his hands, especially when all inflammatory complication had been previously overcome, rarely gave rise to irritation. He did not say it would not do so in some cases, but he did say, from its shape and lightness, it appeared to him to possess several advantages over those at present in use. It is made by Coxeter.

Dr. BRUNTON exhibited a specimen of Knotted Cord.

Dr. MURRAY exhibited a similar specimen, the knot being of a very unusual character. (Fig. 1.) Dr. Murray loosened the knot during the birth of the child, which enabled it to be born alive.

FIG. 1.



Dr. RASCH exhibited a case of Hydramnios, in which one of the twins had died from twisting of the cord close to the umbilicus. The sac of the dead fœtus was considerably larger than that of the fœtus which was born living. A short history of the case was given.

The PRESIDENT remarked that this case raised the interesting question as to the influence of the death of one fœtus in cases of twins in producing dropsy of the amnion —a question which could only be determined by the collection of a large number of cases. In the case which he had brought before the Society at its last meeting, it was the sac of the living fœtus which contained the largest quantity of liquor amnii.

CASE OF HYDRONEPHROSIS OF THE FŒTAL KIDNEYS; IMPEDING LABOUR.

By HENRY M. MADGE, M.D.

MRS. W—, æt. 22, was taken in labour with her first child, on January 23rd. She had not quite gone the full term, and during her pregnancy she had been in ill health,—

curiously enough, suffering from an affection of the kidneys. Labour tedious; breech presentation; delivery effected by making traction with a silk handkerchief, passed round the presenting buttock and thigh. The placenta came away easily and the mother did well; child still-born. The difficulty was caused by an enormously distended condition of the child's abdomen, which on examination was found to be owing to two enlarged kidneys, in size and shape resembling bullock's kidneys; each lobule was converted into a serous sac, giving the lobular appearance of, and constituting each kidney a complete sero-cystic tumour. On holding the kidneys up to the light, they were transparent like a bladder; all the secreting structure had disappeared; nothing but the septæ between the lobules, or skeletons, as it were, of the kidneys, could be seen. The supra-renal capsules were healthy and well developed, and are seen in their normal position in the preparation (which accompanied the paper), surmounting the kidneys; the renal vessels and ureters were either obliterated or dwindled into such small proportions that they could not be found in the surrounding tissues.

The bladder was empty, but with a small catheter it was possible to distend it with air, the distension extending freely along the urachus to the ligatured extremity of the umbilical cord. Several of the renal serous sacs were opened, and about a half a pint of their containing fluid collected. Its colour was that of pale healthy urine; neutral to litmus paper; sp. gr. 1010. On boiling it there was no urinous odour; it coagulated readily, and on adding nitric acid it became completely decolorized; unsuccessful attempts were made to obtain from it urea or uric acid. On setting a portion aside and examining the sediment under the microscope, I found what was doubtless the débris of kidney tissue, namely, broken uriniferous tubes, some with hæmorrhagic spots, some red throughout, a few crystals or prisms resembling triple phosphate; numerous fat globules and a good many broken epithelial and other cells. There was also to be seen here and there bodies resembling Malpighian bodies, that is, granules closely packed together and enclosed in a capsule.

On the whole the fluid under examination appeared to consist chiefly of serum, containing some of the elements of urine and the macerated remains of the wasted kidneys.

Although the case does not give any direct evidence on the point, indirectly it goes to prove the absence of urea in the fœtal system; for, notwithstanding that the child had been vigorous and was well developed, there had for some considerable time been no kidneys to separate urea from the blood.

Dr. MADGE, in reply to some questions put by the President said that in breech presentations he had on some occasions used the silk handkerchief in preference to the blunt hook, because with its use there was less danger of lacerating the fœtal tissues; it was not so easy, however, to apply, and he thought the blunt hook in common use might be made a more efficient and safer instrument if the arm of the hook were made larger and covered with some soft substance, such as india-rubber or wash-leather. The handle might also be improved; in its present form, after using it with sufficient force to do any good, the hand became cramped. Dr. Madge then made some remarks on the physiology and pathology of the fœtal kidneys, and gave details of the very few cases of hydronephrosis that have been recorded by English authors, comparing them with the case he had brought before the society.

CASE OF EXTRA-UTERINE PREGNANCY TERMINATING IN SUDDEN DEATH.

By. WM. MARTYN, M.D., and F.R.C.S., Exam.

MRS. W—, æt. 34, confined naturally fifteen years ago, no pregnancy since until this occasion. She had menstruated regularly until the beginning of July of the past year, and had been generally healthy. On first consulting me she complained of very distressing pains in her abdomen, sometimes in the region of the stomach, and also in the pelvic

region, frequent sickness, and so much general distress that she was miserable. Soon after these symptoms set in she ceased to menstruate, her colour and nutrition were good, her pulse natural. Believing at this time she might be pregnant, I examined her mammæ, and there found ample evidence of it. Still, on her subsequent visits to my consulting room, she complained so much of the symptoms already mentioned, also of decided and severe neuralgic pains, especially of her right arm, such as she never had before, that I was at loss to discover any explanation of this state; I had never seen so much distress in a natural pregnancy. She was much averse, at this period, to a vaginal examination. No treatment in the form of opiates or baths afforded any relief. In due time she felt the movements of the child—the abdomen enlarged much as usual. The family were now satisfied of the fact of pregnancy, and I did not see her for a considerable time.

After about seven months from her last menstruation, her husband came to me saying his wife was suffering so very much, she could get no rest at night, in fact, her state alarmed him. I now for the first time saw her in bed (February 4th of this year). The abdomen was large, as in advanced pregnancy; although she complained of severe pain in the upper and lower part of the gravid mass, there was no marked tenderness in handling or pressing these parts. At the upper part I felt, as I thought, the lower limbs of the fœtus; at this point she complained of frequent and severe pain. The abdominal walls were well loaded with fat. The patient complained of a feeling as if the child was trying to turn over from the left side to the right. The fulness of the belly, looking back upon the case, was not so prominent in the mesial line as in ordinary pregnancy, although at the time this did not strike me, as the enlargement was regular and not one-sided. The mammæ were largely developed, the areola beautifully marked, showing a very advanced state of pregnancy; milk appeared on pressure. On examining for the fœtal heart with the stethoscope, I found its beat very well marked low down in the right iliac

region, where it may be met with in an ordinary pregnancy; the sounds were a little more distinct than usual, so much so, that the nurse heard them readily with the stethoscope; the pulsations, counted several times, were 152 in the minute, whilst the mother's pulse, at the same time, was 72. Per vaginam, I found the os in the normal position, large, soft, broad, yielding, but not dilated; some neck remained, as if the full time of gestation had not arrived. The uterus was considerably enlarged. No tumour was felt in this region, possibly from my not exploring high enough. On pressure on the abdominal wall the uterus was felt to come down, but by ballotement there was not the usual rebound.

As the reckoning was about seven months, I abstained from introducing my finger into the os. On the whole, finding the uterus large, the os with all the features of the gravid state, the fœtal heart sounds in a situation common enough in natural pregnancy, I inclined to the idea that the case was one of natural pregnancy, although I considered at this time the question of extra-uterine fœtation. I made but this one rather hasty examination, but I feel that a little experience in such cases would have rendered it not difficult to have made out the true state of things. Remembering that the general fulness of the abdomen was broader than usual, the child, notwithstanding the abdominal walls were thick, was so distinctly felt,—the fœtal beat unusually clear through the stethoscope, the absence of a due enlargement of the uterus, as felt per vaginam—above all the anomalous and severe pains felt in the belly during the whole period of pregnancy—are conditions, it appears to me, suggestive, if not conclusive, as to the fact of extra-uterine pregnancy. The misleading signs were the cushiony and enlarged state of the os, the situation of the fœtal heart sounds, and the state of the mammæ, &c.

About one o'clock p.m. the following day I was sent for in haste. My patient was said to be faint. She had been moving about the room complaining of great distress in her belly, but that her pains were not like labour pains; she sank down on a chair in a state of sudden faintness, was

lifted on to the bed, gasped a few times, and was quiet. I now came into the room and found she had ceased to breathe. I at once proposed to open the abdomen, but the husband, shocked at the announcement of the death of his wife, would not consent to the operation.

On the following day, with Mr. Pick, of St. George's Hospital, a post-mortem was made. Upon laying open the cavity of the abdomen a large quantity of fluid blood escaped, and many large clots were found lying in the peritoneal cavity, partially covered over by intestines; a fœtus was found loose in this cavity; it was well nourished, and perfect in every respect, and was apparently of the full period of uterine life. On tracing the cord (which was perfectly natural as to length, &c.), it was seen to enter a rent in what was at first sight supposed to be the uterus, as it presented the ordinary appearance of this organ at the full period of gestation; it was, however, rather inclined to the left side, and partially filled up the left iliac fossa. This cyst, for such it proved to be, was removed from the body for further examination. Its walls were thin, and it appeared to be formed between the two layers of the broad ligaments, at all events, this ligament could be traced downwards after enveloping the round ligament, and seemed to separate and enclose the cyst. On the walls numerous large vessels could be seen ramifying, which came from the uterus. To the interior of the cyst was attached the placenta (which was apparently natural and of full size), and throughout the rest of its extent the fœtal membranes. The Fallopian tube was enormously elongated, and ran along the upper surface of the cyst; it was pervious throughout, and terminated by opening at the fimbriated extremity, which was spread out on the wall of the cyst into its interior. Near the extremity of the tube there was a small rounded thickened mass, which was supposed to be the ovary, though no trace of ovarian structure remained. The uterus was much enlarged, and its cavity elongated; its mucous membrane was covered by a quantity of mucous secretion, consisting under the microscope of epithelium and oily matter, and with no trace of mem-

brane. The os uteri was plugged with the usual gelatinous material, as in the ordinary gravid state. The walls of the uterus were much thickened, and the whole organ elongated. The post-mortem notes are those of Mr. Pick.

The specimen was referred to Dr. Martyn, Dr. Madge, and Dr. Phillips for further examination.

Dr. ROUTH referred to a remarkable paper, by Dr. Robert Lee, in the 'Medico-Chirurgical Transactions,' on the state of the uterus in these cases. In nearly every case which the author had been able to examine in museums and elsewhere, he found a deciduous membrane existed. In this case there seemed to be none, and so it was in direct opposition to the conclusions of Dr. Robert Lee. The condition of the mammæ he thought were of little value in the diagnosis of such a case, since, wherever the pregnancy occurred, they would be more or less developed. Had the examination been made at an early period, and the extra-uterine pregnancy diagnosed, he thought that something more might have been done, though the question was what that should be. He thought it might be justifiable in such cases to perform gastrotomy since death was almost sure to take place in the course of pregnancy. It was true that it had been unsuccessfully performed in some of these cases: still with more extended experience in opening abdomens and more knowledge of the consequences likely to follow, its advisability was a question worth reconsidering. To ascertain the time at which it might best be done, he suggested that some conclusion might be arrived at by the collection and comparison of all the cases in which the operation had been performed.

Dr. PLAYFAIR said that on looking at the preparation it could not be doubted that it was within the limits of an operation, and that would have given her a much greater chance of recovery than allowing the cyst to rupture. The difficulty of the diagnosis in these cases must, however, always stand in the way of any attempt at operation.

Dr. HEWITT observed that in most cases of extra-uterine pregnancy the uterus itself enlarges considerably, and the os uteri participates in the changes going on in the uterus, and thus its condition is of very little diagnostic value. The question of an operation would depend very much upon the diagnosis of the case, and he could only recollect one or two instances in which the case had been diagnosticated during life. One of these had been recently brought forward by Dr. Hicks. Such cases were themselves uncommon and their diagnosis during life was still rarer.

Mr. SCOTT suggested that where there was a well-grounded belief in the existence of extra-uterine pregnancy, the sound might be used as a means of diagnosis to determine whether the uterus was empty, and so, if possible, to settle the point.

Dr. MARTYN, in answer to questions, said that no trace of decidual membrane could be discovered in this case, either by the eye or the microscope. He believed that any operation such as gastrotomy must have terminated fatally, from the immense quantity of blood that escaped when the cyst ruptured. With respect to the origin of the pregnancy, there had been no severe pain or shock at any period which might have indicated the escape of the ovum. The only thing in the condition of the woman which was at all remarkable was that she was sick out of season, the sickness differing from the sickness of ordinary pregnancy, since it occurred not only in the morning but throughout the day. There was also an utter inability to rest. The use of the sound, it was clear, would have determined the whole question, but the state of the os suggested the possibility of intra-uterine pregnancy, and so he avoided even the introduction of the finger.

REPORT ON DR. MARTYN'S CASE OF EXTRA-UTERINE PREGNANCY.

THE preparation consists of the uterus and the whole of its appendages, with the extra-uterine cyst attached. Altogether, it weighs twenty-three ounces. Having been hardened in spirits about a month the microscopic examination cannot now be conducted with much advantage.

The uterus.—Of the above weight probably more than one half belongs to the uterus, or about five or six times more than the natural weight. Length seven and a half inches, or about twice the natural length. Width at fundus three and a quarter inches. The uterus has been partially laid open; towards the fundus the thickness is about half an inch, gradually lessening towards the cervix. Os uteri, large and gaping, readily admitting the middle finger. The mucous coat is thick and soft, in some parts smooth, in others rough and shreddy. With a lens some of these shreds show that

Eastmacott delt et dirext

W. West lith.

semi-organized honeycombed appearance said to belong to the decidua. Towards the cervix the mucous membrane is still thicker and more spongy. It is easily scraped away from the uterine tissue. A good deal of gelatinous mucus still remains.

Right Fallopian tube.—Four and a half inches in length, and normal in size and appearance. From the thickening of the mucous membrane it was not easy to find with a probe the uterine orifice of the tube; but, on placing the preparation under water and inflating with air through the fimbriated extremity, air bubbles came up through the water, showing that the tube was pervious.

Left Fallopian tube.—A string has been passed through the tube, tracing it to the extraordinary length of fifteen or sixteen inches. Some portion of the distance traversed by the string appears, however, to be artificial. It courses over the extra-uterine cyst from right to left; the fimbriated extremity becoming blended with and lost in the cyst-walls.

Right ovary is small and shrivelled, and its external surface shows the usual numerous puckerings from previous escape of ovules. On making a section through its substance the stroma is pale but healthy. In this single section no ovisacs are to be seen, except one near the left upper surface; this was pretty large, and contained a minute clot of blood and a little serum. Judging from this and its situation it had probably given recent exit to an ovule.

Left ovary is nowhere to be found, its ligament is of the natural length, about the same as that of the opposite side, and conducts directly to the walls of the cyst, to which it is attached, as to the ovary.

The extra-uterine cyst which contained the fœtus is now filled with horse hair. It measures about eight inches in diameter. There is a large opening in it, through which the fœtus escaped into the abdominal cavity. The cyst is everywhere covered by peritoneum (except a large patch in its anterior surface, removed probably by accident). There are a few slight adhesions to the posterior surface of the uterus—otherwise its surface is smooth and free. Its coats are of

variable thickness—in some places extremely thin and transparent, and traversed by blood-vessels; those positions of the coverings corresponding to the placental site are highly vascular and thickened. On looking into the interior of the cyst about one half of the internal surface to the right appears to be occupied by the placental site. This is indicated by the presence of portions of adherent placenta and of blood-clots hardened by spirit. Portions of the placenta may with a little care be separated from the walls of the cyst, an intervening membrane of apparently condensed cellular tissue breaking up in the process. The maternal tissues in apposition with the placenta are, therefore, simply thickened and vascular walls of the cyst already alluded to, with a layer of plastic lymph, or something analogous to it intervening. No evidences of a true decidual membrane are to be seen here. The rest of the interior of the cyst is in some parts smooth, in others, rough and uneven as if made up of various elements, perhaps some of the fœtal membranes blended with ovarian coverings. No vestige of ovarian substance to be seen. The exterior of the cyst corresponding to the placental site, and where it is partially denuded of its peritoneal covering, is traversed by numerous blood-vessels with thin walls. In their present small and collapsed condition they cannot be used or even easily traced for the purposes of inquiry or experiment. During life they were doubtless large and distended with blood, keeping up constant supplies to the placenta.

Conclusions.—One matter of inquiry in connection with the case is as to what form of extra-uterine pregnancy it belongs. We incline to the opinion that it is either tubo-ovarian or ovarian, and most probably the latter. Many arguments have been urged against the possibility of an ovarian pregnancy, and it has been stated by some that none of the cases on record are genuine. From the circumstance in this case, of the fimbria of the left Fallopian tube having become blended with the walls of the cyst; it certainly may be said to have the appearance of being tubo-ovarian; but this may have been accidental, just as the walls of growing

cysts may elongate and form adhesions with any neighbouring viscus. Among the reasons for considering the case one of ovarian pregnancy are: 1st, the absence of the left ovary; 2nd, the undisturbed relations of the left ovarian ligament, and its terminating in the coats of the cyst—just as it would do in the coats of the ovary; 3rd, the large size of the cyst during life; 4th, the placenta being to the right side of the cyst, close to the attachment of the ovarian ligament. In fimbrial pregnancy the placenta is often found in a cup-like depression in or near the fimbriated extremity of the tube. 5th, the entire cyst—when *in situ*—being covered with peritoneum derived, no doubt, partly from the ovary, and partly from the broad ligament.

With regard to another disputed question, the existence of a uterine decidua in these cases, we have not gathered anything conclusive. The appearances of the interior of the uterus give the impression either that it has contained a decidua which may have passed away unobserved, or that the membrane has only had a partial and imperfect existence.

(Signed) W. Martyn,
Henry Madge,
J. J. Phillips.

ABSCESS OF FEMALE URETHRA.

By Dr. Cory.

Mrs. P—, a tall, stoutly-built married woman, forty years of age, having had but one child, and having always menstruated regularly, stated that on the 29th of April she first experienced a slight pain on passing water, with a feeling of fulness at the lower part of her body, an occasional attack of retching, a desire for the recumbent position, no appetite, great thirst, and headache. These symptoms gradually increased in intensity

till the time I saw her, which was on the night of the 2nd of May, when she was suffering severely from pain over the lower part of the abdomen and up the vagina. Her face was flushed, countenance anxious, pulse jerking and wiry, tongue loaded with fur, continual retching, slight delirium, a forcing and bearing down, with constant micturition. I had much difficulty in persuading her to a vaginal examination, when I found the parts hot and exquisitely tender, the slightest touch causing her considerable agony. The urethra was of large size, and felt like a great roll, filling the vagina completely. The meatus urinarius was so buried in the swollen parts, as scarcely to be made out. The bladder appeared empty, and so irritable that no urine could be retained longer than a few minutes.

I could detect a sense of fluctuation in the most prominent point of the swollen parts, and proposed giving her relief by the use of the lancet: to this she refused her consent. I therefore gave her a good dose of opium, and ordered her a large bread-and-water poultice to the vulvæ. A few hours subsequently I visited my patient and found her much relieved. She told me that about half an hour before my arrival she had had a violent fit of retching, and felt something had burst within, which had given her immediate relief from pain, and a cessation of all the distressing symptoms with which she had been troubled. I had no difficulty in obtaining a second vaginal examination, and found the urethra considerably reduced in size, very little tenderness on pressure, a small rent in front of the meatus, about half an inch from the orifice, with pus exuding on the slightest pressure. She was now able to retain her urine in the bladder and to partake of some nourishment. The after-treatment consisted of tonics, with a liberal diet, and in a few days she was quite enjoying her usual health.

Remarks.—She could not account for the abscess coming on in that particular part; had had no blow or injury whatever; had always enjoyed good health with the exception of an occasional leucorrhœa; never had gravel nor stone in the bladder. The symptoms came on gradually from the 29th of

April, and increased in intensity till the pus was discharged. The leading features of her case, and the most marked and evident, were the distressing and continued retching, the constant micturition, as well as the excessive irritability of the bladder. These, with the vaginal symptoms, led me to diagnose the case as one of abscess of the urethra, situated in the cellular tissue surrounding the urinary passage. There was no fistulous opening established, and she has had no unfavorable symptom since.

OBSERVATIONS AND REMARKS ON CASES OF TWINS.

By JOHN BRUNTON, M.A., M.D.,

SURGEON TO THE ROYAL MATERNITY CHARITY.

THE following observations may be somewhat novel to the Fellows of this Society. Though they may not be of any practical advantage in the pursuit of obstetrical practice, yet they are interesting as orginal observations.

Some time ago I attended consecutively two cases of twin births, in each case the children were of like sex, twin females and twin males; there were two amniotic sacs, two placentæ in one, and a single placenta of the double battledore type in the other case. The occurrence of the twins of same sex associated with the presence of two placentæ arrested my attention. Immediately it came to my recollection that, on the last occasion on which I delivered twins, the children were of different sexes, and there was only *one* amniotic sac.

On consulting my obstetric note-book, in which I have recorded nearly 2000 cases attended in private practice, I found that I had attended eighteen cases of twins, which I have tabulated, with the addition of seven cases obtained from friends.

Tabulated cases.

Date.	*Name.*	*Sex.*	*Sacs.*	*Date.*	*Name.*	*Sex.*	*Sacs.*
1862.				1862.			
Feb. 16	K—	M M	2	..... Mar. 22	K—	M F	1
	——			.... Dec. 19	H—	Do.	1
1865.				1865.			
May 27	W—	F F	2	..... Nov. 22	K—	Do.	1
	——			..... Dec. 7	F—	Do.	1
1866.				1866.			
	——			..... July 30	M—	Do.	1
1867.				1867.			
Dec. 28	H—	Do.	2	..... Nov. 11	H—	Do.	1
May 6	B—	M M	2	.....	——		
Oct. 23	D—	Do.	2	.....	——		
1868.				1868.			
Feb. 17	B—	Do.	2	..... June 13	F—	Do.	1
May 10	S—	F F	2	..... July 12	K—	Do.	2
				Dr. Slater's case.			
May 12	S—	M M	2	..... May 12	P—	Do.	1
Dec. 20	D—	Do.	2		——		
Mr. Duke's case.				*Dr. Hay's case.*			
Nov. 25	S—	Do.	2	..... Jan. 18	C—	Do.	1
1869.							
Jan. 2	W—	F F	2				
Dr. G. Hewitt's case.							
Feb. 3	—	Do.	2				

Also three cases from my friend Dr. Richardson, twins of same sex and *two* sacs, making a total of twenty-five cases, all carefully recorded, though the notes are short, making *fifteen* cases of twins of *like* sexes with *two* amniotic sacs. *Ten* cases in which the children were of *different* sexes; of these ten, in *nine* cases there existed *one* sac, and in the tenth two sacs.

Naturally I was now led to consult our modern authors on obstetrics, and expected to have obtained notes of many cases.

I searched carefully such works as those of Drs. Blundell, Beattie, Burns, Bedford (of America), Churchill, Hodge, Rigby, Ramsbotham, Simpson, and Tyler Smith; and, though I can find an abundance of statistics referring to the frequency of twin cases and their percentage, in most no

notice is taken of the sexes of the children, except in Dr. Simpson's works, where seventeen cases are recorded :—

3 cases,	both male	Twins.
5 „	„ female	
9 „	male and female	
17		

But no mention is made of the amniotic sacs.

Dr. Ramsbotham at page 525 of his work remarks that "each individual child which the uterus contains, according to the law of nature, is distinctly enveloped in its own membranes . . . possesses its own quantity of liquor amnii &c.," and a little further down he states, "it has been remarked that *both children have lain in one bag of membranes.*"

I have just found *three* cases recorded in which notice of *one* set of membranes has been taken. One case is to be found in Dr. Bedford's work; in that case a good deal of stress is laid upon the curiosity of the fact.

In a footnote (at page 79) Dr. Ramsbotham, while saying that the occurrence of twins in one bag of membranes is *very seldom,* goes on—"in a MS. note-book of my late father's I find that in October, 1791, he delivered a woman of twins, there being *one* bag of membranes . . . . and on February 6th, 1840, one of my pupils at the London Hospital delivered a woman of twins when there was only *one* bag of membranes." Unfortunately, in none of these cases, though the existence of *one bag* was mentioned, there is no record of the sex of the children.

Since writing thus far I have obtained notes of another case, in which *one* bag of membranes and twins of opposite sexes existed, making a total of twenty-six cases.

It may be asked—What about the placentæ? in fifteen cases it was noted.

In five of the cases in which children of same sex and *two* sacs coexisted, the placenta was either double battledore or there were two distinct.

In four of the similar cases the placenta was single.

5 having two placentæ,
4 „ one „

9 recorded.

Of the remaining six cases, in which the existence of two children of opposite sex was observed with one sac, *four* had *one* placenta and *one* two; while in the odd case, where male and female existed with two sacs, *one* placenta was found.

4 having one placentæ,
1 „ two „
1 „ one „

6

In brief—by way of summary of the twenty-six cases recorded—in

15 children of same sex—*two* sacs,
10 „ different sex—*one* sac,
1 „ „ *two* sacs.

26

Are the above cases merely coincidental, only associated by chance? or have they any substance in them from which we may draw a conclusion?

My opinion is, that there is something more than mere coincidence, and that the lesson to be learned points to the function of the ovary in relation to the sex of the ovule.

The conclusion may be fanciful, yet the facts bear out that probably the ova cast off from each ovarium are alternately male and female, *i. e.* that each ovary casts off *at one and the same time* a male, or each a female ovum.

That I am borne out in this opinion I quote from Dr. Ramsbotham (page 524):—"Twins may possibly proceed both from *one* ovarium, or the rudiments of one fœtus may be furnished by each gland. When the conception, however, is *more than duplex*, it is clear that *one* ovary must supply

two, for no instance has yet been met with where these organs were in excess." "It is commonly supposed that twins are the result of one connection, and instances are noted where this must have been the case."

There are cases on record in which twins were evidently the result of two connections (*vide* Ramsbotham). Such will explain the exceptional case noted above.

My conclusion is that, if a male ovum comes down from each ovary at one and the same time, conception taking place, we have an explanation of the existence of *twin males* and *two sacs*—so if female ova descend.

But if two ova come down from the same ovary, either together or immediately following one another, and conception takes place, we have twins of *opposite sexes* and *one sac* of membranes. No case of twins of same sex in *one* bag of membranes. I do not think that the state of the placentæ throws much additional light on the subject, as in part of the cases only was it noted.

The facts above are too few to warrant a Baconian induction; all they do is to throw a possible, if not probable, light upon the subject.

Since the above was read to the Society I have ten additional cases, in all of which there were two sacs, with twins of the same sex.

Dr. PLAYFAIR observed that one class of cases Dr. Brunton had forgotten to take into consideration—that of conjoined twins which were never of different sexes. In the whole of the twenty-one cases of conjoined twins described in a recent volume of the Society's 'Transactions,' all were of similar sexes. That was entirely incompatible with Dr. Brunton's theory, because conjoined twins, according to it, should always be of different sexes.

Dr. BRUNTON differed from Dr. Playfair, in thinking the circumstance of conjoined twins being of the same sex fatal to his theory, since a male ovum might at the same time come down from each Fallopian tube, and then the two meet together and coalesce. But he merely wished to place the facts on record without drawing any conclusion from so small a number of cases.

APRIL 7TH, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—49 Fellows and 3 visitors.

The following gentlemen were admitted Fellows of the Society:—Dr. James Brisbane, Mr. William Cunningham Cass, Dr. Sidney Hayward, and Mr. Barnard Spaull.

Mr. Edward Fletcher, of Carlton, Melbourne, was declared admitted.

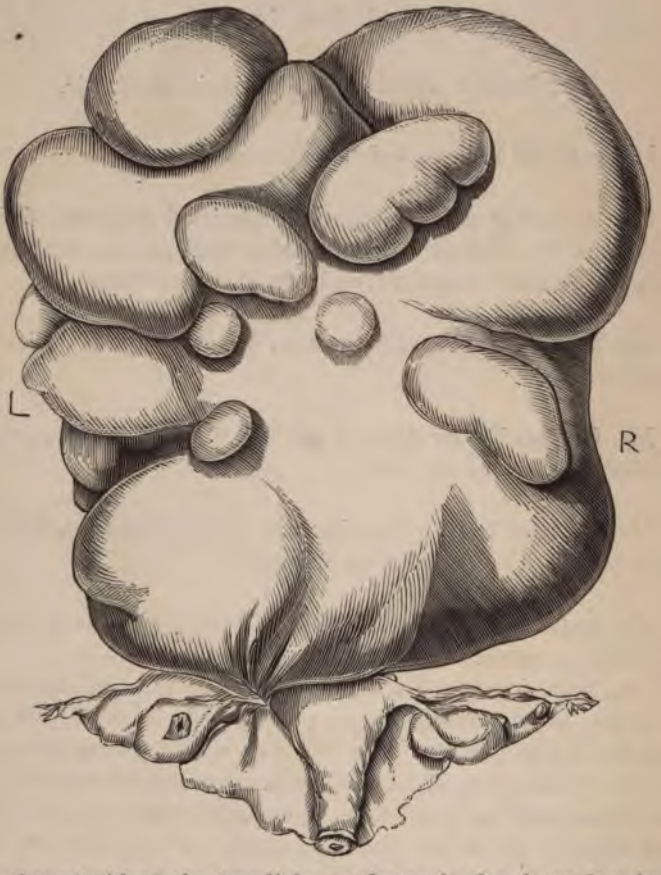
Mr. Charles Taylor Aveling, M.R.C.S., of Homerton, was elected a Fellow of the Society.

Mr. Osborne Delane Marriott and Dr. C. Holdrich Fisher were proposed for election as Fellows.

Mr. SPENCER WELLS exhibited a fibroid outgrowth from the fundus uteri. The specimen, which weighed 34 lbs. 10 oz., he had removed a few hours before the meeting from a single woman thirty-six years old. Eleven years before, half her lower jaw had been removed with a fibrous tumour by Mr. Pemberton, of Birmingham. An abdominal tumour was discovered five years ago; it enlarged gradually, and she was twice in the Birmingham Hospital. During the last six months the tumour had increased rapidly, and she became very weak and lost flesh. On admission to the Samaritan Hospital a very large tumour was discovered, which evidently contained no cyst large enough to warrant tapping, but which did not feel so hard as a fibroid tumour of the uterus. No

vascular murmur was audible in it, and it appeared to move quite independently of a uterus of normal size. When the tumour was exposed, Mr. Wells was surprised to find that it was not ovarian. It sprang from the posterior surface of the

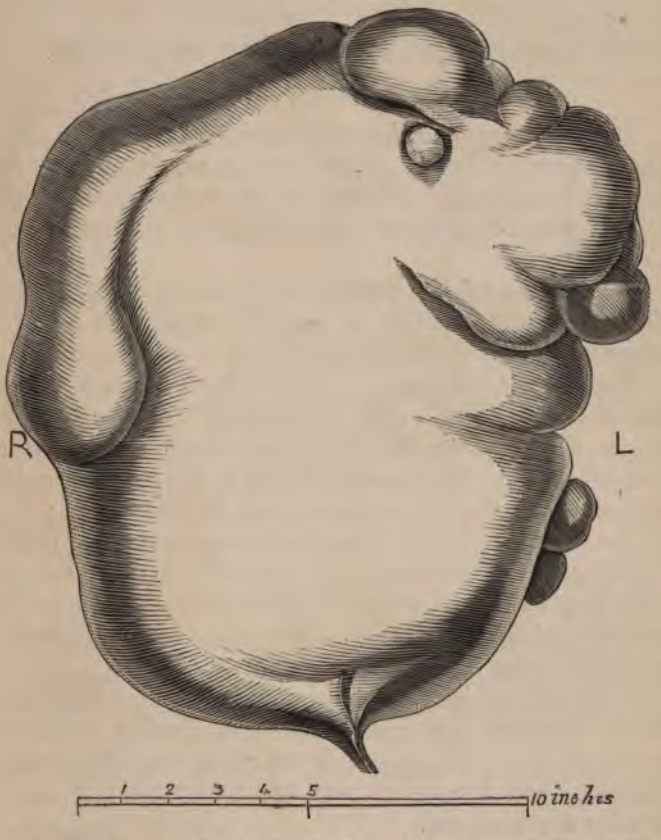
FIG. 2.



fundus uteri by a short pedicle, as shown in the above drawing, which represents the posterior surface of the uterus with the Fallopian tubes and both ovaries. A ruptured Graafian vesicle is seen on the left ovary. The pedicle was secured temporarily by a clamp forceps (which was exhibited), and the

tumour was cut away. Some bleeding spots where adhesions had been separated were secured by an acupressure needle, and the clamp was removed. Bleeding vessels were secured by harelip pins and twisted sutures, which also served to fix the

FIG. 3.



bleeding surface to the abdominal wall by transfixion. Mr. Wells promised to make the result of the operation known at a future meeting. The anterior surface of the tumour is shown in the second drawing. Both were drawn to the measured scale by Dr. Junker. R indicates the right side,

and L the left in both figures. The specimen was referred to Dr. Braxton Hicks and Mr. Wells for report.

The PRESIDENT considered this an unusual case. Fibroid tumours of the uterus of large size were usually very hard and dense, and their growth slow.

REPORT ON THE ABOVE SPECIMEN.

By J. BRAXTON HICKS, M.D., F.R.S., &c.

The tumour when removed weighed 34 lbs. 10 oz. It was about seventeen inches diameter, of a nearly globular form, having five principal lobules on its upper aspect. These lobules were about three inches diameter, and were partially pediculated.

The tension of the tumour varied throughout. It had a fluctuation very similar to that of an ovarian polycystic growth, which it also resembled much in appearance.

The interior was found to be free from cysts, excepting a few of small size, of a false kind, formed by separation of the layers of the tissues, the largest not an inch in diameter, of irregular form. The tissue of which it was composed was arranged in a manner concentric with the true centre; except in the lobules, where it was arranged around their centre—differing from the irregularly concentric arrangement generally found in mural uterine fibroid growths. When cut into, serum exuded rather freely. The inside of the growth was of a pink, semi-translucent colour.

The microscopical examination of the growth showed it to be composed of areolar wavy tissue, interlacing in all directions, but the arrangement of the fibres was very open, and between them the serum was held; very little, if any, true uterine fibres existed.

Mr. WORSHIP, of Seven Oaks, exhibited a specimen, and gave the following history of a case of ovarian disease. He said:

The history of this case is, that ten years ago A. B— was

standing on the window-sill of a house cleaning the windows of the first floor; a portion of the woodwork by which she was holding gave way, and she was precipitated to the ground. She was taken up insensible. She received several wounds about her face, fractured her lower jaw, and bit off a considerable portion of her tongue.

From the very first account I can gather there appears to have been very considerable enlargement of the abdomen, though she had never had a day's illness prior to this accident.

I saw the patient in consultation with Mr. Marriott, at Godden Green Hospital. She was of low stature, emaciated, could not open her mouth more than half an inch. Her breathing was very short, and she could take but very little food.

On examination of the abdomen I found it projecting far above the lower end of the sternum, and protruding almost to her knees. There was universal dulness on percussion all over the abdominal walls, which appeared extremely thin.

There was slight œdema of the legs.

We decided that, whatever subsequent steps might be taken, her immediate discomfort should be relieved by tapping, which was done on May 12th, through the linea alba, midway between the umbilicus and the pubis.

Eleven gallons of thick viscid chocolate-coloured fluid were drawn off. No enlargement of any kind could we discover anywhere either in the abdominal cavity or iliac fossa.

The lower ribs were very much everted by the pressure from below; portions of the fluid were sent to Mr. Paget, Dr. Lionel Beale, and Mr. Hulme for examination.

She improved rapidly in health after this operation, and left the hospital in about six weeks able to walk about comfortably.

On April 4th this year I was asked by Mr. Marriott to assist him in making a post-mortem examination of this case.

His report was that she had been taken ill with vomiting of bilious matter, and died after two days' illness.

We found very considerable enlargement of the abdomen,

the body generally not much emaciated; the superficial veins were much enlarged. Six gallons of dark, thick, gelatinous matter were drawn off, and the abdomen carefully opened; but from adhesions to the cyst this could not be effected without opening the cyst itself.

We found the cyst firmly adherent to the entire abdominal parietes, but wholly unattached to the other viscera. There was a small patch of peritoneal inflammation, and a very small portion of fluid within.

The cyst with the uterus I now beg to exhibit to the Society.

All the other organs we found quite healthy, though much displaced by pressure.

Dr. MURRAY exhibited an intra-uterine fibroid, which he had successfully removed by the single wire *écraseur*.

Dr. CORY exhibited a lad aged 11 years, on whom he had successfully performed tracheotomy for an attack of croup which had lasted fifty-seven hours, and in which death appeared imminent.

Dr. MEADOWS exhibited several instruments which he had received from Professor Lazarewitch, of Charkoff. Among them was a new hysteroper (Fig. 4), which the author stated he had used with great success in cases of prolapsus uteri; also two varieties of intra-uterine stems made of vulcanite: (Fig. 5), one of these was tubular and perforated, so as to admit of the free escape of the uterine discharges; the other was of a spiral shape, and the advantages claimed for these were that they retained their position well, and at the same time allowed the uterine discharges to find their way out, either by the spiral grooves in the one, or through the perforations of the other. A uterine sound was also exhibited (Fig. 6), at the handle end of which was an oval concave plate of bright polished steel, which was intended to serve as a metroscope.

FIG. 4.

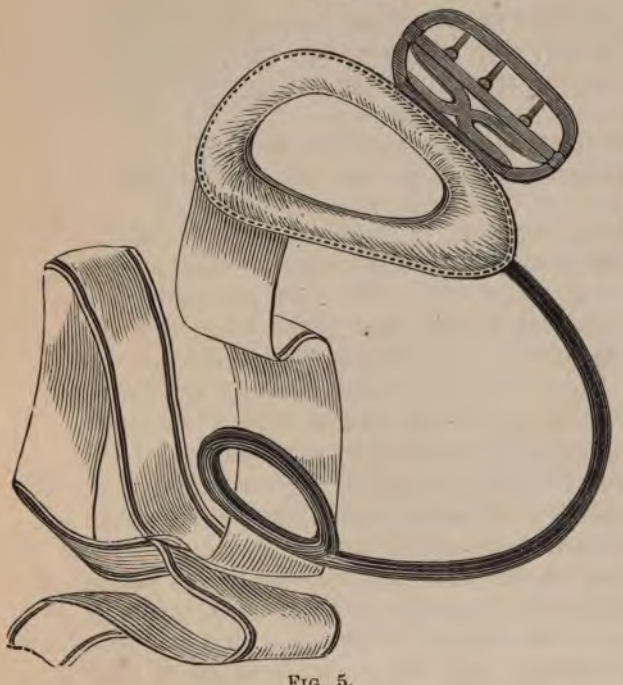


FIG. 5.

FIG. 6.

UNUSUAL AND INTERESTING APPEARANCE OF AN OVUM THROWN OFF AT THE SECOND MONTH, WITH HISTORY OF CASE.

By W. R. Rogers, M.D., M.R.C.P. Lond.,
PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

The drawings I beg leave to bring to the notice of the Obstetrical Society were taken from nature. The appearances of the ovum, while recent, were very interesting and peculiar, and exhibited a good caste of the interior of the uterus. I desire briefly to give some account of the preparation itself from which these drawings are taken; and here I may be permitted to say, that the patient from whose womb it had been thrown off (occasioned by a sudden fright) had been married about eight years without becoming pregnant. She had suffered from severe dysmenorrhœa, bearing down pains, and shattered health. She had for years been under varied treatment, but never derived any relief till the uterus was freely opened, first by sponge tents, and subsequently by the hysterotome some months afterwards. This was soon followed by pregnancy; and the ovum (from which these drawings were taken) was the product of the first conception.

The decidua uteri presented an accurate cast of the cavity of the uterus, which was thus shown to have assumed a very irregular shape with rather prominent angles or cornua, and deeply depressed fundus. To one of the cornua was attached a stout bundle of papillæ-like appendages, which evidently occupied the uterine end of the Fallopian tube—a very unusual circumstance, as the decidua seldom or never extends itself far into the tubes. The opposite cornua was much smaller, and simply nipple-like, smooth, without appendages. The external surface of the decidua was smooth, though much folded and puckered with deep depressions and nipple-shaped processes, and presented little of the shaggy appearance proper to its healthy normal condition. It was

macott direx^t

minutely studied with vascular openings, and the membrane in general was remarkably thick and tough. The inner surface, which is usually as smooth as a serous membrane, was in this case rough and shaggy, with lymphy flocculi; the decidua ovi was very much contracted, thickened, puckered, and irregularly attached to the decidua uteri, as though the two membranes, after having been united in a great part of their extent, had been forcibly torn apart; and that this actually happened is evinced by the remnants of the branching villi of the shaggy chorion in the outer membrane. The manner in which the walls of the vascular sinuses are reflected over the dendritic villi of the chorion, as first clearly expounded by the late Professor Goodsir, was very obvious in some thin sections of the decidual membrane. I need not say that this miscarriage was a severe blow to the fond hopes of my patient, but soon afterwards she found herself again pregnant, went to her full time, nothing unusual occurring, and was safely delivered of a daughter.

HÆMORRHAGE FATAL IN FORTY MINUTES.

By J. Hyde Houghton, Esq.,
SURGEON TO THE DISPENSARY, DUDLEY.

Communicated by the Honorary Secretaries.

On the 14th of August, 1866, between the hours of 4.30 and 5 p.m., I was requested to visit Mrs. F—, æt. 45, who had had a fall, which it was thought was bringing on her labour. She was eight months advanced in her sixteenth pregnancy. A few minutes past five a second hasty message came to say she was flooding badly. I immediately hastened to her house, which is not more than five minutes' walk from mine, and on my arrival found that she had been dead about twenty minutes.

It appears that Mrs. F— was hanging her own bed curtains, and for that purpose was standing with one foot on a chair and the other on the side of the bed; the chair slipped,

and she fell right on the nates—an enormous flow of blood instantly commenced, and continued till she was dead. An intelligent neighbour who was called in told me that she found her sitting on the floor where she had fallen, holding on by the side of the bed, that she was unable to raise her herself, but that as soon as she could get assistance she got her into bed, applied a bandage as tightly as possible, gave her brandy, and lowered her head. In a few moments she exclaimed, "I am blind." She added, "she was quite sensible, did not seem to faint, but died at once." "The blood rushed from her as if it came from a force pump." These were the words of my informant. The corpse was ghastly pale. There had been no convulsion, and, as far as I could make out under such melancholy and exciting circumstances, the time which elapsed from the fall till death could not have exceeded thirty or at most forty minutes. She never had the least pain.

On the 16th of August, at 11.30, I examined the body, assisted by two medical friends. It was well nourished; a layer of fat an inch thick covered the muscles of the chest and abdomen; the organs generally were very pale; the uterus was healthy; the membranes not ruptured; the placenta attached rather to the right of the fundus. The whole was removed entire; the greater part of the placenta was adherent to the walls of the uterus, and after removing it there was no distinctive line or appearance on its face by which we could determine what part had remained adherent, and what had been separated. There was not a trace of coagulum or spot of blood on the mouth of the vessels, or in the uterus itself. The uterus and placenta, so far as could be judged by the eye, were healthy; the os admitted the forefinger, and was surrounded by a well-defined ulcer. There was a plug of mucus in the orifice, but even this was not blood-stained; and there was no clot or blood in the vagina, and the only evidence of blood we could find was on the vulva, gluing the labiæ together. There was no mark of bruises on the abdomen or thighs.

As an old Bartholomew's man I sent the case to Dr.

Greenhalgh, as a case of uterine hæmorrhage, with a request that he would read it at the Obstetrical Society. He, however, most kindly wrote to me, and suggested that it was not so; and asked to inquire as to the existence of varicose veins of the thighs and vulva; and I have since ascertained that these existed to a very great extent. I now feel quite satisfied that these were the source of the fatal hæmorrhage, the more so as I have known one case in which rupture of a varicose vein of the leg produced an equally speedy fatal issue before medical assistance could be obtained.

Though puzzled to reconcile the perfect absence of blood in the uterus and vagina at the post-mortem, I must confess that the idea of ruptured varices never occurred to me, or to either of my medical friends who assisted me at the autopsy, till I heard from Dr. Greenhalgh; and this I the more regret, as it prevented my putting the source of the bleeding beyond doubt by finding the orifice through which the blood escaped. I presume, however, that there can be no doubt about it.

I am induced to bring the case thus corrected before the Society for the following reasons:—1st. As an instance of how great and rapidly fatal hæmorrhage from varices has occurred, and may again occur, towards the end of pregnancy; and, 2ndly. To direct especial attention to the fact that a patient may lose her life from hæmorrhage from other sources than the uterus; and consequently, that the practitioner, whenever called to a patient during life, or to witness a similar case to the one recorded, should pay great attention, not only to the state of the uterus, but to the condition of the external genital organs.

The PRESIDENT stated that he had seen not long since a case where a varix just within the vulva formed a considerable tumour during pregnancy, and which slight force would have ruptured. Once also after delivery he had seen considerable hæmorrhage from a varix which had been torn during the labour, and the source of the loss was at first by no means obvious.

Mr. SPENCER WELLS and Mr. WORSHIP referred to cases in which they had seen death speedily follow the rupture of a varix in the leg. In Mr. Worship's case death followed within five minutes.

ELEPHANTINE DEVELOPMENT OF THE CLITORIS.

By W. R. Rogers, M.D., M.R.C. Phy. Lond.,
PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

I venture to think the subjoined short case not unworthy of being brought to the notice of this Society, illustrated as it is by the accompanying drawings of life size.

It shows to what extent of disfigurement a habit unfortunately too prevalent may transform the natural parts, especially when the constitution is tainted with syphilis.

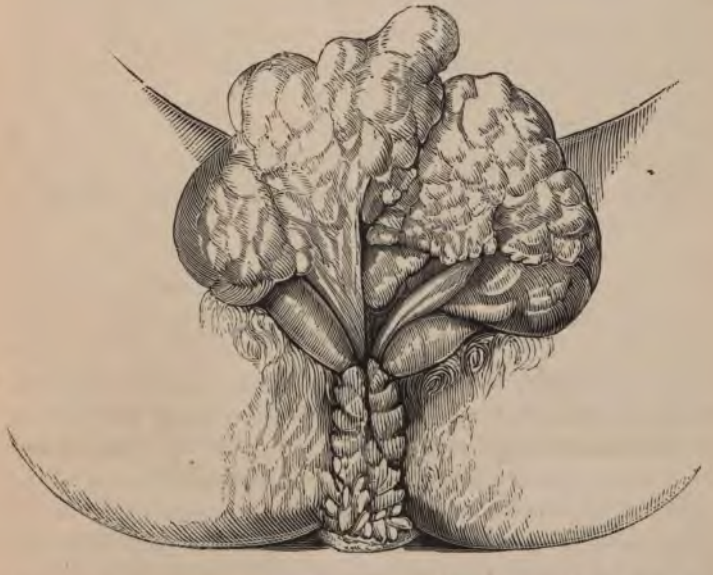
Fig. 7.

Mary R., æt. 25, admitted into the Samaritan Free Hospital, November 19th, 1866. She was in a very reduced state of health from the discharge and irritation of her privates, from the enormous size of the clitoris, and of worty growths around the anus. On careful examination her

lungs were found tuberculous; her mother died of phthisis some years before. On questioning the patient she admitted having had sexual intercourse several times with a young man whom she believes never had syphilis; previously she masturbated occasionally. On his death four years ago she recommenced the habit, till it brought on the enlargement now seen in the drawings. The discharges from the larger growth she thinks brought out the smaller ones around the anus. She concealed her wretched state as long as she could, and was then sent to the Samaritan Hospital.

After a course of cod-liver oil, steel and quinine, which greatly improved her health, I ligatured the elephantine

FIG. 8.



clitoris, having frozen it by two of Dr. Richardson's ether spray jets, and cut off the smaller growths. The part came away in a few days, and healed rapidly, leaving no disfigurement; all irritation subsided, and no one would now imagine that any operation had been performed on the parts, as there

is a good-sized and nearly normal clitoris remaining. Dr. Churchill in his fourth edition of the 'Diseases of Women,' page 72, figures from Dr. M'Clintock's work on 'Diseases of Women' a similar growth; there is a like suspicion of syphilitic contamination in mine as in Dr. M'Clintock's case; but no mercury or iodide of potassium was given. She left the hospital to return home, the parts natural in every respect.

Fig. 7.—Front view of enlarged clitoris.

Fig. 8.—Back part of clitoris, which has been raised and turned up to show its posterior aspect and entrance to vagina; perinæum and anus covered with warty growths. These woodcuts are greatly reduced from the natural size.

AN INVETERATE CASE OF ULCERATION OF THE CERVIX UTERI, CURED BY THE APPLICATION OF STYPTIC COLLOID; WITH REMARKS.

By James Wynne, M.D., of Guatemala.

(Communicated by Mr. Spencer Wells.)

In November, 1865, I saw Mrs. S. D—, in consultation with Dr. Baca, her attending physician. From the history of the case it appeared that the mother of the patient had died several years previous of cancerous degeneration of the neck of the womb, and that about four years prior to the time of my visit the patient was attacked with what she believed to be the same malady.

Dr. Baca had treated the ulceration of the neck of the womb with various caustic applications, including the nitrate of silver, the nitrate of mercury, and nitric acid of various degrees of strength, and succeeded after a lapse of six months in effecting what he believed to be a permanent cure, and

was on the point of discharging his patient and permitting her to return to her home.

The purpose of calling me into consultation at this juncture was to advise as to the proper treatment for hæmorrhoids, under which Dr. Baca supposed the patient to be suffering, as well as to ascertain the cause of, and, if possible, to relieve, certain anomalous nervous symptoms from which she suffered, notwithstanding the improved condition of the uterus.

Upon introducing the index finger into the anus, I found that no hæmorrhoidal tumour could be detected; but that the indurated neck and perhaps the body of the uterus impinged upon the anterior portion of the rectum, from which it could be removed by the pressure of the finger upon the anterior part of the rectum, but would immediately return to the former position upon the removal of the pressure. The tumour thus formed was sufficient to cause defecation to be performed with difficulty and no little pain, and naturally gave rise to the suspicion that the function of the intestine was interfered with by a hæmorrhoidal tumour. I then expressed the opinion that the whole difficulty, not only in regard to the function of the rectum, but also as to the nervous symptoms, might be traced directly to the abnormal condition of the uterus, and advised an attempt to restore that organ to its healthy condition before discharging the patient. I also said that, notwithstanding the favorable appearance of the cervix uteri, there might probably be ulceration within the interior of the neck, a condition by no means uncommon, and one which I always had reason to suspect when the nervous symptoms continued after the healing of the outer ulcerated surface. Dr. Baca was so firm in the opinion that no ulcer existed within, that an examination was not insisted on, and after advising a course of treatment apparently adapted to the case I retired, and heard no more of the patient for some months.

In the following April, however, the patient again returned to Guatemala for medical treatment. On this occasion she selected me as her medical attendant, and from that time onward I had the entire charge of her case. It appeared

that a few days after the consultation she had returned to her estate in the country, where she had remained during the interval, suffering in the mean time from a bearing-down pain in the uterine region, at times quite acute, and at others of less intensity, as well as a dull aching pain in the small of the back, both of which were increased upon the slightest exercise, so much so, indeed, as to confine her for the greater part of the time to a recumbent position. This, together with a continued deterioration of the general health, had induced her to return again to Guatemala and submit herself anew to medical treatment.

The general symptoms presented at this time were—irregularity of appetite, constipation, a pallid aspect, general debility, and nervous excitation, manifesting itself in a variety of hysterical symptoms. The menstrual discharge was profuse, and continued eight or nine days at each period, and in the interval an abundant leucorrhœal discharge took place. An examination with the speculum showed a slightly increased vascular action in the vagina and neck of the womb. This latter, although hard to the touch, exhibited no ulcerated surface. Upon separating the lips, however, in a strong light, a small ulcer was seen upon the lining membrane, which bled freely on the application of a cotton tent. This ulcer appeared so very insignificant as to promise speedy relief upon the application of one of the many remedies used for this purpose; but, warned by previous experience, while I gave my patient hope of an ultimate cure, I at the same time advised her that in my judgment her treatment would be protracted and tedious, and so it ultimately proved, far beyond my worst anticipations.

While the treatment was directed to sustain the general tone of the system, and calm those reflex irritations that constitute so important and not unfrequently so troublesome a complication in the management of uterine affections, it addressed itself with sufficient energy to the removal of the ulcer by means of local applications. In regard to these it is needless to enter into details; suffice it to say that all the usual remedies suggested by my own experience, or recom-

mended by others, were each in their turn carefully used. The solution of the nitrate of silver of various degrees of strength, from that advised by Montgomery and Meigs to the strong solution of Ashwell, as well as the solid pencil as recommended by Bennet, were each fully experimented with, and, indeed, from my own predilection for this remedy, longer persevered in than any other. The tincture of iodine of Churchill and Tilt, the acid nitrate of mercury, the powdered alum, and the fused potash with lime, were all carefully used, not for a few days, but sufficiently long to test their adaptation to the case under treatment. Nor were counter-irritants, hip-baths, mild laxatives, and soothing and astringent vaginal injections omitted. These constituted a part of the treatment during a period of two years and ten months. On several occasions two or three months were allowed to intervene without any active local treatment, in order to determine how far nature was competent to effect a cure.

The last of the unsuccessful remedies tried was the Potassa Fusa cum Calce, which was used according to the method I have found most successful in other cases, which was to introduce the solid pencil of caustic potass with lime into the neck of the womb, and to allow it to remain in contact with the surface to be acted upon for a few seconds, according to the loss of tissue required. The place of the caustic was immediately supplied by a pledget of lint saturated with the tincture of iodine, which application was repeated every three or four days during the process of healing.

In this mode three applications were made at intervals of about two months between each, and I was only waiting for a favourable opportunity to make a fourth and much more thorough application, involving an extensive destruction of the uterine substance in the midst of which the ulcer was situated, when I received among my medical journals the lecture of Dr. Richardson upon "Experimental and Practical Medicine," published in the 'Med. Times and Gazette,' which is chiefly devoted to an exposition of the properties

and mode of application of the remedy to which he has given the name of "Styptic Colloid."

Upon the perusal of this lecture I resolved to postpone a further application of caustics until I should have had an opportunity of proving the efficacy of this new remedy, which, although nothing was said of its adaptability to such cases, I judged from analogy might be useful. Fortunately the formula for its fabrication was given in the lecture, and I was thus enabled to place it at once in the hands of an experienced chemist for preparation.

At this time, August, 1867, my patient had been a sufferer from induration and ulceration of the cervix uteri for nearly seven years, for the last two and a half of which she had been under my treatment. During the whole of this latter period I was unable to note any decided improvement in the condition of the diseased part. It is true that the system of treatment under which she was placed had succeeded in sustaining her general health, and had considerably mitigated the sufferings due to her highly exalted nervous condition, but so far as the ulcer was concerned, it remained about the same as when I first undertook the case.

The beneficial effect of the styptic colloid was manifest from the first, and at the expiration of the third week the ulcer was entirely healed, and the induration of the surrounding tissues sensibly diminished. The patient continued under treatment until the close of the year, gradually recovering from her former ill health, and was day by day enabled to increase the amount of exercise. At the date of this report over one year had elapsed since the final closing of the ulcer, since which it has not reappeared; the leucorrhœal discharge has sensibly diminished, and the uterine functions are gradually assuming a more healthy condition.

At the time of the publication of Dr. Richardson's lecture I was aware that collodion had been recommended as a coating for ulcers of the os uteri, especially by Drs. Mitchell and Aran, but I do not think that the use of collodion, even if glycerine were added to prevent its contractile tendency, would have produced the same beneficial result as the styptic

colloid. Be this as it may, there is no doubt that the suggestion for the use of colloid remedies in this case first arose from the perusal of Dr. Richardson's lecture, and I am extremely indebted to him for thus aiding me with his counsel in the most protracted and vexatious case of ulceration of the os uteri I have been called to treat. I have since used the styptic colloid in several other cases of ulceration of the os uteri with beneficial results; but as these would probably have recovered with the use of the usual remedies, I do not cite them as instances of the superior advantages of this remedy over others. In regard to these cases, I can only say that they appeared to recover with more facility under the use of the styptic colloid than with the ordinary mode of treatment, the time of curation usually being abridged full one half.

The beneficial results of the application of the styptic colloid in these cases, and more particularly in the one under consideration, suggests a very important practical question, which is this:—After all, have we not been mistaken in attributing the obstinacy in healing and continuance of these ulcers to the diseased condition of the base in which they are situated; and is not this diseased base rather due to the continued irritation and additional vital power imparted to it by the presence of the ulcer itself, which, from the peculiar nature of the parts, is not permitted to throw out a healthy cicatrizing surface? Or, in the absence of ulceration, to the highly exalted state of the mucous membrane lining the cervix, and perhaps the body of the uterus? I say the exalted state of the mucous membrane, because, taking the present case as a type of this class of the disease, the ulcer bears no proportion to the excessive constitutional disturbance, the exaltation of the nervous functions, the pain upon the slightest exertion, the inability to take exercise without great bodily suffering, and the extreme obstinacy of the complaint to yield either to local or general treatment.

The result in the present case clearly demonstrates that the destruction of any deep-seated portion of the cervix by escharotics or dissolvents was not indicated; but if I erred

in their application I can only say that I erred in very good company. From Récamier down, almost every writer on uterine pathology who has spoken of the subject at all has located the chief difficulty in the indurated or hypertrophied substance of the cervix uteri; and hence the universal recommendation of caustic applications.

Among those who have most contributed to the establishment of this medical dogma are Sir James Simpson and Dr. Henry Bennet. Now, while I have the highest respect for the great ability and acumen of these distinguished medical men, I have always resorted to the use of escharotics for the purpose of destroying the indurated or hypertrophied substance of the neck of the womb with the greatest reluctance, and frequently with the greatest misgivings as to the result. Not that I doubted the correctness of this universally received opinion, but because I feared to induce a new diseased condition which I might not be able to control; and hence, in my own practice, with the exception of the use of the nitrate of silver, which, in a dilute form, merely acts as a local covering to the ulcer, I have always deferred the use of caustics until every hope of relieving the disease without their aid was exhausted.

It is possible that under the more active use of caustics a cure might have been effected in this case; but, beyond question, the remedy of all others adapted to it was the styptic colloid. Now, how did this remedy effect a cure? Why, precisely as Dr. Richardson tells us it acts in other cases of wounded or ulcerated surfaces in other parts of the body. Upon its application "the heat of the body gradually volatilizes the ether and alcohol, and the tannin and cotton, as the ether leaves them, are thus left stranded on the surface in intimate combination. In proportion as the ether passes off, the blood or the secretions of the surface permeates the tannin and cotton; but tannin acts directly upon albumen, coagulating it, and thus forming it into a kind of membrane, almost like leather. The cotton meanwhile unites the whole, gives substance to the mass and adhesive quality. When all is solidified, the dressing, in fact, becomes a concrete, having a true organic hold or basis on the tissues, and as the tannin,

if the solution is freely applied, is in excess, any new exudation or blood is for several hours taken up by it, and the annealing is made more complete.

"Thus, by this dressing the air is excluded from every possible direction; not by a mere septum, but by the combination of the animal fluids with the remedy; and because the air is excluded and fluid absorbed there is no decomposition, *i. e.* no oxidation, and because there is no oxidation there is no irritation."[1]

One of the most important offices performed by the styptic colloid, perhaps even more important than the exclusion of the air, in the treatment of ulcers of the cervix uteri, is its capacity to protect the ulcerated surface from the secretions of the uterus, frequently exceedingly irritating in their nature, and always injurious by their presence. In this respect it is more effectual than any other remedy hitherto suggested, and did it possess no other quality it would form an important addition to uterine therapeutics.

The whole effect of this remedy was expended upon the abraded or irritated surface. It possesses no power to attack deep-seated tissues, and certainly is incompetent to remove an hypertrophied state of the neck of the womb, except by its simple action upon the surface itself; and yet in the case before us we have seen that the indurated and hypertrophied state of the cervix, which resisted the application of sufficiently active caustics, gradually and permanently yielded to the local action of this remedy, establishing, by inference at least, the proposition that the induration was caused by the ulcer, and not the ulcer by the induration. Let this point be well established, and the confidence in escharotics will be diminished, and the reliance upon those methods of cure that act directly and permanently on the surface of the ulcer will be greatly augmented.

Dr. MURRAY said that he could, from personal experience, bear testimony to the value of the styptic colloid in cases of

[1] Dr. Richardson's lecture on "Experimental and Practical Medicine."

ulceration and abrasion of the os and cervix uteri. He had also frequently used the Glycerinum Acidi Tannici of the British Pharmacopœia with much success. He preferred the frequent use of the milder caustics and astringents to those which by their strength often made for a time the ulcer larger or deeper.

Mr. SPENCER WELLS said this paper had been sent to him by Mr. Corbet, our *chargé d'affaires* in Central America, with a note saying that Dr. Wynne has long held a distinguished position in South America. Collodion had long been used with good results at the Samaritan Hospital in cases where the lips of the os uteri were excoriated by irritating secretions from the uterus, so that collodion itself was a good application, but it was probably made better by the addition of tannin.

Dr. WYNN WILLIAMS remarked that while Mr. Wells had borne testimony to the good effects of collodion *per se* in abrasions of the cervix uteri, he could, in like manner bear strong testimony to the great benefit to be derived from a spirituous solution of tannic acid (spirit of wine and tannic acid in equal parts). Tannic acid acted not only as an astringent, but as a powerful antiseptic, and therefore the more there was applied over and about the ulcer the better. He stated it as his belief that all the beneficial effects of the styptic colloid were simply due to the solution of tannic acid.

Mr. COLLINGWOOD stated that when practising in Morocco he had in some severe cases of ulceration of the cervix used with the best effect a powerful escharotic, formed by saturating dried sulphate of zinc with strong sulphuric acid.

Dr. ROUTH thought that the ladies of the Harem in Morocco must have uteri very different from the ladies of England, to be benefited by such active treatment as that alluded to by the last speaker. Here ulceration of the cervix was looked upon as only a concomitant of a congested or inflammatory state of the uterus or its membrane. Caustics, when used, like potassa fusa, were to produce, as it were, a larger sore, which, by discharging copiously, would relieve the congestion. Glycerine was applied in the same way, causing a copious flow of fluid. But usually the uterus was relieved of its congestive state by local depletion, leeches, or scarifications, before caustics were used. In many cases depletion alone sufficed to cure the ulcer. If the uterine inflammation was confined to the mucous lining of the uterus, which, from the excoriating qualities of its secretion, produced ulceration of the os, it sufficed to cure the first affection, and the ulcer would get well with ordinary water ablutions.

The PRESIDENT spoke briefly in reference to the pathology of the so-called cases of ulceration of the cervix. There could be no doubt that the bright, vivid appearance of the lining of the cervix which is often associated with general congestion of the

uterus has been frequently mistaken for ulceration. The congestion itself, when causing uterine suffering, was, according to his own experience, associated, in nine cases out of ten, with some noticeable and marked derangement in the shape of the uterus. Necessarily, this view of the matter—and whether or not the case related by Dr. Wynne was of this kind it was impossible to say—would induce a careful scrutiny as to the efficacy of a particular application in the treatment of ulceration of the cervix uteri.

MAY 5TH, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—40 Fellows and 6 visitors.

Dr. Joseph Moore, of Bermondsey, was admitted a Fellow of the Society.

Dr. C. Holdrich Fisher, of Sittingbourne, and Dr. Osborne Delane Marriott, of Sevenoaks, were elected Fellows of the Society.

The following gentlemen were proposed for election :—Mr. Tregenna Biddulph Goss, of Bath, Dr. John T. Griffith, and Dr. C. Dudley.

Mr. SPENCER WELLS exhibited the uterus and ovaries of the patient from whom he had removed the fibro-cellular uterine tumour which he had shown at the last meeting, and which had been reported on by Dr. Braxton Hicks. It was seen that the tumour had been an outgrowth from the posterior surface of the fundus uteri, the rest of the organ being healthy, with the exception of another very small outgrowth. The patient died on the third day after the operation, not from any bleeding, peritonitis, or other direct consequence of the operation, but from fibrinous deposit in the right side of the heart. Superfibrination of the blood had been feared from the first, on account of the rapid rise in the temperature of the body from 98·4° to 101° within twelve hours, and then rapidly upwards to 105·8°. This was accompanied by hur-

ried breathing and feeble rapid pulse, with scanty secretion of urine, charged with urates and pigment. The first sound of the heart became feeble more than twenty-four hours before death, and was inaudible for fully twelve hours. In all operations where peritonitis might be expected, Mr. Wells said he considered its direct effects far less serious than its tendency to cause excess of fibrine in the blood and separation of the fibrine in the heart.

In reply to a question from the President, Mr. Wells said there appeared to be certain seasons in which this condition of the blood was epidemic, and at these seasons croup, diphtheria, and other conditions characterised by fibrinous exudation were also prevalent. Dr. Richardson was constructing a table which would probably be of great value to surgeons, showing by meteorological observations certain relations of temperature, barometric pressure, dryness of the air, amount of ozone, &c., when fibrinous deposits might or might not be feared.

Dr. ROUTH said that in the *éclat* of operation it was perhaps not sufficiently considered that this tendency to fibrinous deposits was perhaps remediable. It was not because it was epidemic that we should remain satisfied, and let our patients die. Diphtheria was such a disease, and yet physicians tried to cure it, and often did. Rheumatism also was a disease in which there was a tendency to fibrinous deposits, but it too was curable. Why not try the same means with this affection at its onset? Dr. Richardson had stated to him that rheumatic fever was amenable to ammonia, and the alkaline treatment for that disease was common. In peritonitis accompanied with flocculent deposits the fluid was often acid, showing that the blood was less alkaline than normal, and pointing to the use of alkalies, which might also be found useful in ante-mortem clots.

LIBRARY OF THE UNIVERSITY OF MICHIGAN

CASE OF CÆSAREAN SECTION.

By Dr. J. Braxton Hicks,

PHYSICIAN-ACCOUCHEUR AND LECTURER ON MIDWIFERY AT GUY'S HOSPITAL; PHYSICIAN TO ROYAL MATERNITY CHARITY; EXAMINER IN MIDWIFERY AT UNIVERSITY OF LONDON, ETC. ETC.

Mrs. —, æt. 40, about seven months advanced in her first pregnancy, had been suffering from uterine pain many hours before she sent for her medical attendant, Dr. Bush, of Streatham. The liquor amnii had escaped, but the date of its escape was uncertain; she said for some weeks there had been a flow of clear water at times. When Dr. Bush examined her he found a hand and portion of the forearm presenting, but he was unable to do more than pass a finger by the arm in consequence of an obstruction. After consulting with a neighbouring medical friend, it was agreed that the case was very unusual, and I was asked to see her. I did so at about 2 a.m. The pains had subsided somewhat, but they had till lately been very forcing. The uterus was very hard, and in continuous action. The pulse was over 100, firm, moderately strong. The tongue was glazed and brown, and the teeth were dry and sordes were on them. She had been constantly vomiting during the former day; and I learnt that vomiting had been a very constant symptom during the whole pregnancy. Indeed I also learnt that attacks of feverishness, vomiting, and abdominal tenderness had distressed her much throughout.

On vaginal examination I found the whole of the upper strait blocked up by a very firm tumour, which pushed over the os uteri to the right side. The fœtal hand and forearm came through the os, but I could not do more than pass a finger by its side, and that not far up. The mass obstructing was firmly attached to the pelvic wall on the left, so much so as to give the impression that it sprang from the bone rather than the uterus itself. As the opening was only about an inch in diameter and circular in shape, and as it was impossible to

alter the position or size of fœtus, I resolved upon delivering by Cæsarean section. As the patient was very much exhausted, and no advantage was to be gained by waiting, I at once proceeded to arrange matters for the operation. In about half an hour this was accomplished, by the kind assistance of Drs. Bush, Shears, and Frodsham. The patient was placed under chloroform, and the urine was drawn off. The incisions through the abdominal walls and uterus were made as usual, the latter rather low down in the body. On dividing the uterus, blood poured out very copiously from a sinus of half an inch diameter. The fœtus was soon removed, the uterus indeed assisting by its contraction. There was no trace of amnial fluid. The placenta was also quickly detached, and attempts made to stop the hæmorrhage. But from the whole placental site it welled up, particularly from one large opening in the posterior wall. The openings of the cut sinus were held by the hand, but the other source still continued obstinate, and the patient becoming blanched and the pulse very weak, I was obliged to employ Liq. Ferri Perchloridi. This ultimately arrested all bleeding but that from the incision, which I treated by a suture. I passed the needle, armed with silver wire, completely through the wall, about a quarter of an inch from the margin of the incision, and brought it out again about half an inch lower down, thus enclosing the opening. After finding the hæmorrhage had quite ceased from other parts, the wires were carried from within through the abdominal parietes, and then fastened with those of the opposite side. To make a more complete opposition, another suture, an inch lower down, was passed through uterus and abdominal walls, and brought together as usual. Elsewhere the abdominal parietes only were transfixed.

In a report on a former case I ventured to suggest the advantage of this procedure to prevent extravasation of the uterine contents into the peritoneal cavity under the effects of vomiting, which in this case was highly probable; and as sutures to close the uterine opening would have been useless to stop the hæmorrhage, this was the simplest method of managing it. Much vomiting did ensue, but, as it afterwards

appeared, without any extravasation into the peritoneal cavity.

The uterine walls were during the operation kept well against the walls of the abdomen, by the finger hooking them up from within; but the tumour pushed the uterus so forward that the necessity was not so marked as in most cases.

After the evacuation of the uterus it was found that there were large masses of fibroid tumour in the uterine walls, particularly at the fundus; one about one and a half inch diameter was pendulous into the abdominal cavity. After the wound was dressed she was placed in bed. In a short time her depressed state passed off, and the pulse rose quickly.

For twenty-four hours after she vomited much; but after that the straining was changed for a kind of eructation, a small quantity of brownish fluid coming up. This lasted, but less frequently, during the third day after the operation. She was free from pain till the third day, when she complained of burning pain in the abdomen; the pulse became quicker, and fluctuating; she became more weak and she sunk three days and a quarter after the operation, perfectly clear in mind throughout. So easy did she feel on the second day that she was anxious to get up. Tympanitis was not severe, but coupled with the enlarged uterus it made the abdomen appear large.

She was given only ice to suck for the first day, after which arrowroot and isinglass were ordered in minute quantities. On the second day a little champagne was given, as also teaspoonful doses of brandy, but it was instantly returned. Suppositories of opium were freely given.

The post-mortem examination showed healthy plastic peritonitis in the neighbourhood of the wound, which on its skin-side was uniting; internally the wound was slightly stained by the iron application. No extravasation into the peritoneal cavity had occurred, notwithstanding that the sickness had been so severe as to drive a small portion of the omentum through the upper angle of the parietal wound. This might be thought an important accident, but in ovariotomy a large mass of the omentum which had been adhe-

rent to the cyst has been left outside the wound without a bad symptom; the portion shrivelling up. The uterus was pushed to the right side and forward, by a tumour which sprang by a narrow neck from the right side of cervix, at right angles to it. It was six inches long and about three wide, that is, when removed. Its form must have been altered, otherwise it must have pushed the uterus above the brim.

This tumour was firmly adherent posteriorly to the brim at the left sacro-iliac synchondrosis, thus preventing its rising above the brim. Its size, it will be seen, was such as to occupy the whole space of the inlet, with a slight exception. The uterus itself was invaded by fibroids, especially at fundus, where the largest was two and a half inches diameter. The rest were smaller, dispersed about the walls. In the line of incision there were none.

The texture of the obstructing tumour was myoma, enlarged like the tissue of the pregnant uterus. It is highly probable that earlier in pregnancy this growth was much smaller.

I should add that the fœtus, which was about the size of a seventh month one, was delivered alive, but only survived a short period.

CASE OF AMPUTATION OF THE CERVIX UTERI.

By Alfred Meadows, M.D.,

PHYSICIAN TO THE HOSPITAL FOR WOMEN, AND TO THE GENERAL LYING-IN HOSPITAL; HONORARY FELLOW OF THE OBSTETRICAL SOCIETY OF BERLIN.

The specimen now exhibited, which was taken from a patient whose history I will briefly detail, is one the like of which I trust no Fellow of this Society has seen, or ever will see again, and I confess freely that I exhibit it now with a great deal of shame, though I trust that the Fellows of this Society will be merciful in their judgment of me, and

lenient in the expression of their disapprobation of what I know, as well as any one, was a great and might have been a very serious blunder. My object in relating such a case as this is that it may act as a warning to others; and though I was fortunate enough to rescue my patient from the dangers which threatened her, and for which I alone was responsible, I am sure that a very different result might in any similar case be anticipated. It is, however, a small satisfaction to me to know that almost the same untoward accident, if I may so term it, has happened on a former occasion to no less a distinguished master of surgery than Marion Sims, and is by him recorded at page 207 of his work on 'Uterine Surgery.' He also states that a precisely similar accident occurred in the hands of a very accomplished accoucheur in New York, so that I am not the only sinner that has offended, and I certainly will not be the only one to keep my misdeed a secret, when I believe, as I do, that good may result from its publication.

The case may be briefly told as follows:—

M. T—, æt. 19, a housemaid, and unmarried, was admitted into The Hospital for Women, under my care, suffering from procidentia uteri. She stated that about a year previously, while lifting a heavy weight, she felt something give way, and very soon afterwards she noticed that the womb was protruding. By degrees the protrusion became larger and larger, until it attained the size which it was when I first saw her, viz. about as large as a lemon. Ever since the accident the catamenia, which had been perfectly regular before, had ceased. The protrusion caused her great inconvenience, and prevented her following her usual avocations. I found on examination that a large ulcerated surface existed on the vaginal wall behind the cervix, and the whole mass was a good deal inflamed. On introducing the uterine sound into the os uteri, which formed the apex of the protruded mass, the uterus was found to measure fully four inches. After some general and local treatment with the aim of reducing the inflammation and healing the ulcer, the organ was replaced, and attempts were made by various

means to keep it *in situ*. These, however, all failed, chiefly because the perineum had been so stretched that little or no support existed in that quarter. I therefore determined to amputate a part of the cervix, which I accordingly did on the 10th of December. Chloroform was not administered, as I seldom give it for these operations. It was observed that rather more pain than usual was experienced, but there was nothing very remarkable in that. About one inch and a half was excised by means of the single wire écraseur. After the operation the patient complained of a good deal of pain, and by night the pulse had run up to 120; opiates were given, and the next day the patient was comparatively easy, but she told us that her water was dribbling away. Little notice was taken of this at first, but its persistence for the next day or two led to an examination, and then to my horror and surprise I found that a rather large opening existed into the bladder, and that part of this viscus protruded through. There could be no doubt that I was the culprit, and that with the cervix uteri I had removed a part of the bladder. This led to an examination of the specimen which I have now the pain of exhibiting here, and there, sure enough, was found attached a piece of the bladder measuring fully one inch and a half from side to side, and about one inch from before backwards. This surely was bad enough, but, to make matters worse, I found, on examining the specimen more closely, that behind the orifice representing the cervical canal was a piece of smooth, glistening, evidently serous membrane, of about equal dimensions with the piece of mucous membrane in front; in fact, it was painfully apparent that I had also removed a piece of the peritoneum from Douglas's pouch. Here, then, was the explanation of the pain, rapid pulse, and general febrile disturbance which, for only about twenty-four, or at most forty-eight hours had seemed so threatening after the operation.

It is unnecessary for me to detail all the subsequent history of this case; suffice it to say that about six weeks after the first operation I operated again for the cure of the

vesico-vaginal fistula, and though not successful at first, owing to the large size of the opening, and to its rather awkward situation, for it was very high up in the vagina, I succeeded ultimately in effecting a complete cure, not only of the fistula, but also of the procidentia, and, of course, of the *allongement* of the cervix uteri.

Now, as I find in our text-books which treat of amputation of the cervix uteri no mention made of this only too possible accident, and as it is one which really might result very differently to the case above detailed, I hope I shall have done good by this voluntary act of self-humiliation, in directing attention to it; and I am sure if I appeal to the good feeling of my hearers they will not judge me too harshly, but will be ready to appreciate my motive, if not to thank me for my courage, especially if by this act they are hereafter saved from a similar catastrophe.

Mr. Spencer Wells said that a chain or wire might be properly applied; but when it was tightened, lax tissues beyond the part first constricted might be drawn within its grasp, if this was not prevented by pins passed beyond the site of constriction or by some kind of shield. Possibly the accident described by Dr. Meadows so honorably and usefully might be so explained.

Dr. Braxton Hicks considered the Society should be proud to contain a Fellow so candid. He had himself, in the removal of a malignant cervix, invaded the posterior pouch of the peritoneum; but the case did well. He thought the accident could always be avoided by pushing up the uterus as high as possible. If no prolongation of the cervix remained, he considered it needless to operate. If any great length remained, then it could be removed without danger of including either bladder or peritoneum.

Dr. Rogers eulogised the courage and honorable spirit which had induced Dr. Meadows to bring before the Society the history of this accident. He (Dr. Rogers) could not think that when once the wire was fixed around the cervix any tissue that had not been previously within its circlet could be drawn in during the operation and cut away. A careful exploration by the sound in the bladder would have shown how low down on the cervix the bladder was attached, and then this unfortunate accident would have been prevented.

Dr. Protheroe Smith, whilst expressing his admiration of the

candour of his colleague in bringing this case before the Society, would remark, what all who were in the habit of performing this operation must have noticed, that the resistance of the tissues to the action of the instrument was very considerable. And this resistance he believed chiefly to arise from the mucous membrane and its connecting tissue. He would, therefore, advocate the plan which he had adopted on several occasions of cutting through the mucous membrane before using the écraseur. In this way, too, there was less risk of drawing adjacent parts within the grasp of the wire. He believed that this plan had been also usefully adopted in operating on hæmorrhoids.

Dr. Gervis could hardly assent to Dr. Protheroe Smith's view that the mucous membrane offered the chief obstacle to amputation of the cervix. In cases in which he (Dr. Gervis) had miscalculated the density of the cervix, and used a wire or rope of insufficient strength, it had happened that before the operation was complete the wire had snapped; but in these cases the mucous membrane had always been cut through, and the obstacle which had proved too great for the wire had been the compressed inner tissue of the cervix itself, and the same held good in cases of removal of large polypi.

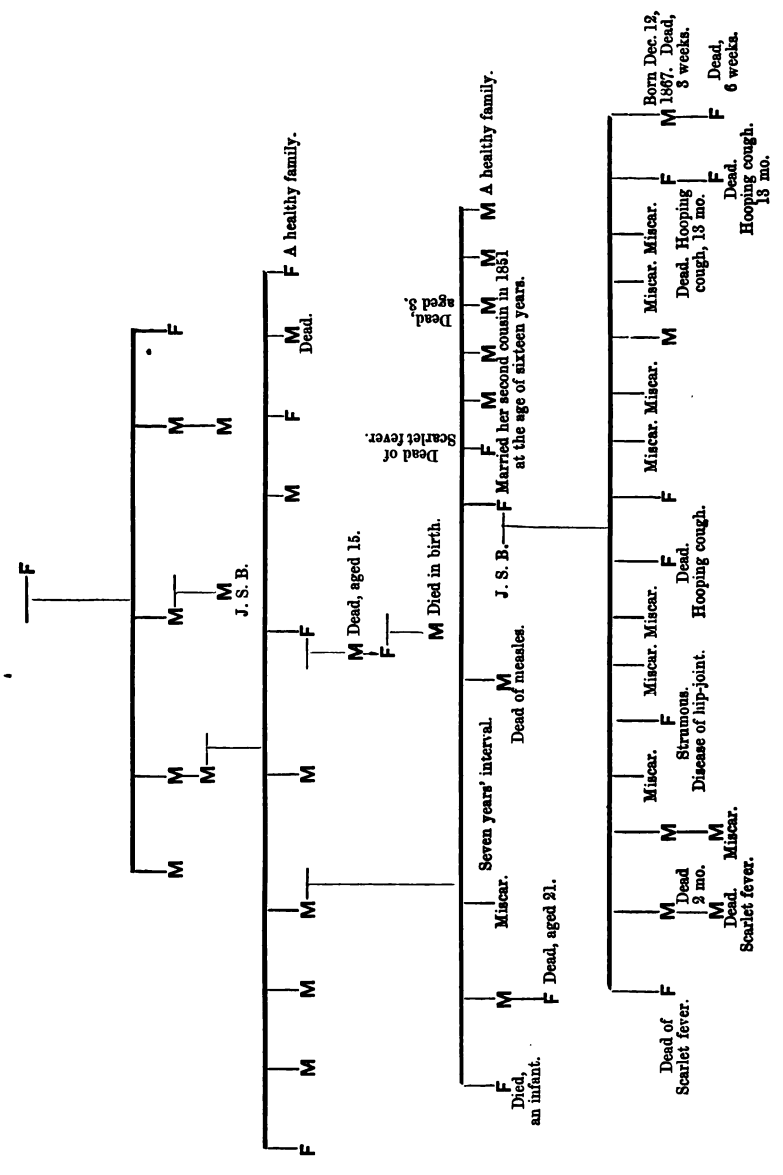
Dr. Rogers wished to remark, on the suggestion of dissecting up the bladder from the cervix before the wire was applied, that he (Dr. Rogers) had performed this dissection on the dead body, and found the difficulties and danger from hæmorrhage would be so great that he had not ventured to perform it on the living subject.

Dr. Protheroe Smith, in reply to Dr. Gervis, could but say that his experience led him to the opposite conclusion, and that he had observed that the mucous membrane of the cervix was that which was most resistant and tough. In reply to Dr. Rogers, he begged to state that he did not dissect up the mucous membrane from its connection with the bladder; he simply cut through the membrane around the cervix, about an inch above the os.

HEREDITARY TWIN-BEARING FAMILY.

By J. Brendon Curgenven, Esq., M.R.C.S., &c.

In December, 1867, I attended Mrs. B—, when she was delivered of twins for the fourth time, including one miscarriage with twins. She had severe flooding and barely


J. S. B.
A healthy family.
Dead.
Dead, aged 15.
Died in birth.
Dead of Scarlet fever.
Dead, aged 3.
Married her second cousin in 1851 at the age of sixteen years.
A healthy family.
J. S. B.
Seven years' interval.
Dead of measles.
Miscar.
Dead, aged 21.
Died, an infant.
Dead of Scarlet fever.
Dead 2 mo.
Dead. Scarlet fever.
Miscar.
Strumous. Disease of hip-joint.
Miscar.
Dead. Hooping cough.
Miscar.
Miscar.
Dead. Hooping cough, 13 mo.
Miscar.
Dead. Hooping cough. 13 mo.
Born Dec. 12, 1867. Dead, 3 weeks.
Dead, 6 weeks.

escaped with her life. This was her sixteenth conception during a marriage life of sixteen years. She informed me that her mother had twins once, her father's sister once, and her father's grandmother twice. Her mother had eleven conceptions, and her grandmother ten, without knowing how many miscarriages there may have been.

To illustrate the prolific character of this family I have drawn out a genealogical chart, which will show at a glance the hereditary twin-bearing constitution that prevailed.

ON PERITONEAL ADHESIONS OF THE GRAVID UTERUS AS A CAUSE OF POST-PARTUM HÆMORRHAGE.

By Graily Hewitt, M.D., F.R.C.P.

It needs no words from me to increase or intensify the dread which all engaged in obstetric practice entertain of that accident which we term post-partum hæmorrhage. Under ordinary circumstances we have this accident under control, and are able to save our patients from its effects; but it is too well known that occasionally the loss of blood which occurs during the third stage of labour is so great, the blood is poured out so rapidly, that almost before the observer is aware of it the patient may have sustained a drain of the vital fluid from the system which no subsequent treatment is capable of repairing.

I do not purpose to enter into the general question as to the causes of post-partum hæmorrhage; but I wish to draw the attention of the Society to the existence of one particular cause of post-partum hæmorrhage which, so far as I am aware, has escaped the attention of obstetric writers and practitioners,—I mean the existence of peritoneal adhesions of the gravid uterus, whereby the organ, after the

expulsion of the child, is held and forcibly restrained in a distended condition, entirely or partially preventing that contraction of the uterus which we all know to be so essential both to the expulsion of the placenta and to the prevention of post-partum hæmorrhage.

Various conditions of the uterus after delivery have been spoken of as causing post-partum hæmorrhage, atony, or inertia of the uterus, irregular contraction, hour-glass contraction, &c.; to say nothing of adhesions of the placenta. I entertain the belief that peritoneal adhesions are responsible for some, at all events, of the cases hitherto classed under the above heads.

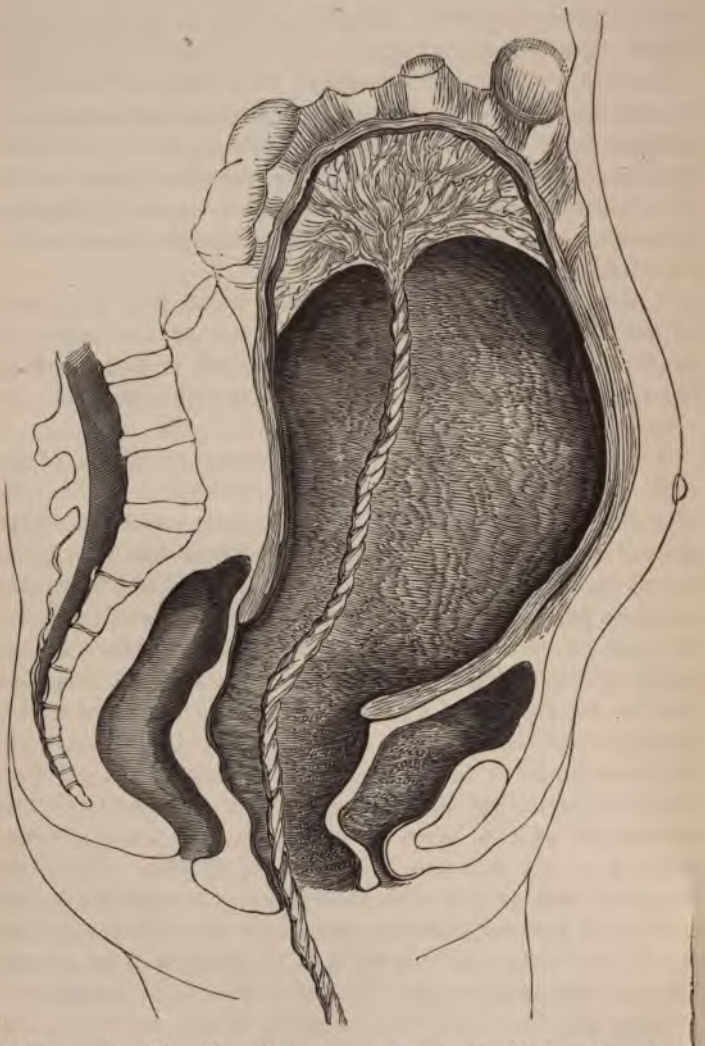
I will in the *first* place briefly point out why such adhesions interfere with uterine contractions, and thus lead to placental retention and hæmorrhage, one or both; and, in the *second* place, relate the clinical facts which bear out the view of the question now propounded.

The contraction of the uterus following expulsion of the child has two effects: the uterus descends lower in the abdomen, and the extent of its peritoneal surface is at the same time very much diminished, the whole resulting in the shrinking up of the organ to a very small bulk. When the placenta has become partially or entirely separated, it is this shrinking up of the organ into a small bulk on which we rely for the prevention of hæmorrhage; and it is obvious, therefore, that if the fundus of the uterus were forcibly held at the upper part of the abdomen and not allowed to descend, the result would be that the uterus would fail at first in expelling the placenta or even in detaching it; and that the mouths of the uterine sinuses must be held open, and a ready egress afforded to the blood in the maternal system. Let it be supposed further that the fundus uteri is attached to the abdominal parietes by the whole of its breadth posteriorly, it will be evident that a condition of things will be present which might lead to great loss of blood in the manner just pointed out.

A reference to the diagram will render this explanation perhaps more intelligible. The uterus is depicted as adherent

superiorly by bands of lymph to the adjacent intestines and

FIG. 9.



abdominal wall; the placenta not yet expelled. At a later stage, the placenta becoming separated, and the bands of

adhesion not giving way, it is clear that the uterus must remain distended superiorly, and bleeding would be almost inevitable.

I come now to the second part of my paper, viz., the detail of the clinical facts whereon the above reasoning is founded. However unpleasant it may be to relate the unsuccessful portion of one's own medical experience, that consideration must and should be put on one side; the interests of science demand candour in the record of unsuccessful equally with that of successful cases. Believing that this is a most important and practical subject in its bearings, I have put together the facts which I have myself viewed, whether good or bad, having reference to this matter.

My first fact is the most valuable of all, seeing that the case is complete in regard to the history, and that a post-mortem examination revealed the explanation of the fatal event. It is the case which first made me aware of the possibility of retention of the placenta and hæmorrhage being due to uterine peritoneal adhesions.

In 1865 a poor woman, æt. 24, was taken in labour at the end of her first pregnancy. She was delivered after fifteen hours' labour of a live child, presentation footling, and an enormous quantity of liquor amnii. There was discovered to be another child. Two hours after expulsion of the first child I saw her, and found that ergot had been given, that there was no expulsive pain, and that the head of the second child presented. I delivered the second child alive by means of the forceps. The head was in the fourth position, and this was changed to the first in the course of the operation. The uterus appeared to contract firmly upon the placenta, and there was no attempt at hæmorrhage. The patient was provided with what I considered to be good attendance, and this being the case, the management of the third stage of the labour was not conducted by myself, and, my services being required elsewhere, I left.

Half an hour after my departure, however, the patient began to lose blood. An attempt was made, unsuccessfully, to remove the placenta. I was again sent for, and on my

arrival I found that the patient had lost an enormous quantity of blood, that the placenta was still in utero, and the patient blanched.

I at once introduced my hand, but found that the top of the uterus lay at an unusually great distance from the pelvis. After introducing the whole arm I succeeded in reaching the top of the placenta, and in removing it without necessity for exercise of much force. The uterus was pressed upon externally, brought down into the pelvis, and secured in the usual manner without loss of more blood.

She rallied very well, and was assiduously fed and watched. Slight mania was observed on the third day afterwards, and on the fifth day slight hæmorrhage occurred, for which Dr. Murray, who was acting for me, found it necessary to introduce the hand and remove clots from the uterus. She gradually became lower, and on the seventh day rather suddenly so. Dr. Murray and myself were about to perform the operation of transfusion, but before we had succeeded in obtaining a suitable subject for the purpose the patient died.

The post-mortem examination, in the performance of which Dr. Murray and myself were kindly assisted by Dr. Buzzard, gave the following most interesting result:—

The right ventricle of the heart contained an almost transparent jelly-like fibrinous clot, which extended into the pulmonary artery, fitting it, however, very loosely. The organs generally were very full, but presented no other remarkable appearance.

The uterus on being examined presented a very unusual appearance. The peritoneal surface wants the smoothness usually observed. It is covered by bands and strings of a tough consistence and fibrinous appearance. The bands are reticulated. The ends of many of these strings are quite free, as if they had been attached to some fixed point and had been broken away from it. These strings or bands are found most numerously on the posterior aspect of the uterus, some of them are three inches long, and when immersed in water they give a quite shaggy aspect to the surface of the uterus. It is quite certain that these bands connected the uterus

PLATE IV

W. West lith.

pretty firmly with the abdominal parietes or viscera up to the time when labour occurred, and that when the uterus descended they were first very much stretched and finally broken across. (A drawing of the uterus taken at the time is herewith exhibited.)

The uterus was nine inches long, its walls three quarters of an inch thick; examination of the interior of the uterus showed the attachment of the placenta had been to the posterior aspect, and here the surface was granular, minute clots filling the apertures of the uterine sinuses, and projecting from these cavities a quarter of an inch or more into the interior of the organ, to the size of a pea. The sinuses of the uterus in the vicinity were large, but empty.

It was ascertained that, previous to the labour, this patient had been in a weakly state of health.

Some further reflections suggest themselves in connection with this interesting case. It has been stated that the uterus was "apparently" well contracted after expulsion of the child, and before the hæmorrhage came on. Was this correct? I believe that such was the case; and my explanation of the matter is, that the uterus followed up the child, so to speak, and in so doing stretched the bands of adhesion so far as to allow of the fundus sinking lower into the abdomen, and so as to present to the feel "apparently" good contraction. But these adhesions, being too strong to give way and possessing a certain elasticity, subsequently, that is, in the course of half an hour, pulled back the uterus to the top of the abdomen, where it was afterwards found when the placenta was actually extracted. The re-expansion of the fundus would of course lead to hæmorrhage.

If we adopt the other opinion, and suppose that the fundus never did come down from the top of the abdomen until the placenta was extracted, the "apparent" good contraction must have been due to a partial contraction of the lower part of the uterus. Such partial contraction will, as I shall presently show in reference to another case, sometimes mislead.

This case, which occurred five years ago, also suggested another reflection; that, however good appearances may be,

it is never well to assume the difficulties of a case are at an end until the whole of the labour is over, the uterus empty, and fairly and satisfactorily secured in its proper place in the lower part of the abdomen.

In the year 1867 the following case occurred to me. I saw in consultation with a gentleman in practice near University College Hospital a patient thirty-five years of age, who had been in very weakly state of health, had had several miscarriages, and was then in labour. The labour had lasted for twelve hours, it was a breech presentation, and no progress had been made for some time. The pains were very frequent, but quite ineffective. After the lapse of half an hour I succeeded in extracting the child. The child was stillborn, but after a quarter of an hour we succeeded in inducing it to breathe properly.

Directing attention then to the patient, we found the uterus apparently low down and contracted, but there was no attempt at expulsion of the placenta. Ergot was given, pressure applied, cold water also. The insertion of the cord could not be reached by the fingers, and the placenta was still in utero. After waiting three quarters of an hour it was determined to insert the hand. I then found the uterus to be in a state of hour-glass contraction, that the tumour felt low down was not the fundus uteri at all, but that the fundus lay high up under the spleen, enclosing the placenta. By gently drawing at the cord and dilating the contracted middle part of the uterus the placenta was got away without much trouble. The hand had to pass a great distance before the manipulations necessary could, however, be carried out. With the placenta there came away several clots. The uterus apparently followed up the placenta well, the hand was kept firmly applied over it externally, and the contraction seemed to be good.

In a few minutes, whether five or ten is uncertain, while the hand was still pressed over the uterus, there occurred suddenly such a violent outpour of blood from the vagina as to be perfectly alarming. The duration of the flow could not have exceeded a minute, but it was very great in amount.

Ice was in the room; it was at once applied internally and externally, and brandy was freely administered. The hæmorrhage at once ceased. For a quarter of an hour the patient gave no evidence of prostration from the effect of the bleeding, but at the end of that time the pulse began to flag. Spite of all that could be done to revive her she became lower, although no more blood was lost, and at the end of an hour and a half transfusion was performed. About three ounces of blood were injected by means of my apparatus in quantities of one ounce at a time. The effect was at first to rouse her and to induce her to toss about and cry out; but the final catastrophe could not be averted. By injections and by the mouth together nearly a bottle and a half of brandy, a remedy I have seen successful in many cases quite as bad as the one now related, was used. My opinion at the time was that this patient was the subject also of adhesions of the upper part of the uterus to the abdominal parietes. I have no proof of this, however, for no post-mortem examination could be obtained. No other explanation of the fact of the fundus uteri remaining so persistently at the upper part of the abdomen appears satisfactory.

I will next mention another case where the course of the symptoms appeared to me to warrant the belief that peri-uterine adhesions were present, though, in this particular instance, the effects produced were of an entirely different character.

A lady, the wife of a physician in London, came under my observation recently, and presented a combination of symptoms which led me to infer that peritonitic adhesions between the gravid uterus and the intestines existed. At the end of the eighth month of gestation she was seized without apparent cause with violent pain extending over the whole of the abdomen. The pain was so severe and so continuous during the whole of one day that the patient became quite collapsed. (Mr. Taylor, of Ebury Street, was consulted in this case.) It was then considered advisable that I should see her with the view of determining as to the propriety of inducing labour.

I found that the abdomen was very tender, that the pain had lasted, as before stated, for the whole day, and that there had been latterly some difficulty in procuring satisfactory action of the bowels. The patient was greatly exhausted, and very strong doses of opium had failed to give relief. I suggested the administration of an enema containing turpentine, and further expressed my opinion that, should the pain not be relieved shortly, labour should be brought on and the uterus emptied. I considered the patient at that time to be suffering from an obstruction in the bowels, consequent on or produced by the pressure of the uterus, or, more probably still, by adhesions resulting from peritonitis on the surface of the uterus.

Five hours later the labour came on, and the patient was rapidly and safely delivered.

She remained tolerably well for two days, when, after the use of a slight injection, the abdominal pain returned as bad as before, together with great tenderness at the right side in the iliac fossa. The following day there occurred suddenly a very large evacuation of offensive fæces, this being preceded by a feeling as of something giving way in the abdomen. Further discharge of fæces occurred subsequently, and it was very evident that a considerable accumulation had existed before the labour set in.

Ten days after the labour the abdomen was still tender; there was still much pain, the uterus was very much larger than it should have been at that period, and to the right side of it there was a sort of prolongation upwards, which might very well have been due to adhesions between the uterus and the intestines at that situation. Previous to this time it had been quite impossible to examine the abdomen closely enough to make out the outline of the uterus.

I think the above history clearly points to adhesion of the uterus to the intestines, and probably to constriction of the intestine by the adhesion, the result being obstruction, distension of the intestine, and violent pain. The sudden giving way of something prior to the evacuation points to this also; and the subsequent physical condition of the parts apparently

justifies the interpretation put upon the case. I will not, however, insist that my opinion is in this latter case the correct one, as the facts might have another interpretation, and unfortunately there was no pathological proof.

In conclusion, I venture to express the belief that the subject now broached is an important one in its bearings on obstetrical practice. The inferences which follow as regards the management of the third stage of labour are of a very obvious nature. To follow up the uterus by the hand after the expulsion of the child, to be satisfied, by actual and close manipulation externally, that the uterine tumour possesses the proper shape, and that it is well down in the abdominal cavity,—these points are evidently those to which we should direct our attention, not simply in one case, but under all circumstances. So far as my experience goes, post-partum hæmorrhage is far more liable to occur where the attention of the practitioner (as was the case in the second instance above recorded, is called away from the mother by the fact that the child is stillborn, and absorbs all the energies of the attendant. It is during the few minutes which immediately followed the expulsion of the child that the condition of the uterus mainly is liable to go wrong, and if there be a hidden pitfall such as adhesions of the uterus of the kind here described, it is likely that extraordinary care will be required to avoid it.

Dr. Matthews Duncan has published some very interesting remarks on the fixing of the uterus by adhesions, but his remarks apply solely to the uterus in the non-gravid condition. Peritonitis leading to formation of adhesions may it is now shown by the pathological facts presented to the Society occur during pregnancy, and the pregnancy may go on undisturbed, or materially so at all events, by the existence of peritonitis. It appears to me probable that the occurrence of peritonitis is not unfrequent in the pregnant state, and if so it will go far to explain those anomalous pains and distressing sensations incidental to the pregnant state, and which are generally set down to other causes. Further research will doubtless increase our knowledge on this

subject; for the present I content myself with pointing out the connection of adhesions thus resulting, with retention of the placenta and consequent post-partum hæmorrhage.

Dr. GERVIS was hardly prepared as yet to accept fibrinous bands of no greater strength than those attached to the specimen exhibited as sufficient to prevent due uterine contraction, unless there were coexistent uterine inertia. Adhesions of a nature to check uterine contraction must almost of necessity have been the result of peritonitis occurring during the progress of gestation, and he would like to know if there were any evidence of such peritonitis having occurred during pregnancy in the cases cited. He had recently attended in her confinement a lady who had been the subject of pelvic cellulitis and abscess of a chronic character, and in whose confinements since the first occurrence of the cellulitis there had on each occasion been much anxiety from post-partum hæmorrhage. In her last confinement this danger was again apprehended, and it did, in fact, occur; and in this case he had certainly at the time looked upon it as arising from inertia uteri, due to the general depression of strength brought about by her long-continued suffering, but, viewed in the light of Dr. Hewitt's suggestive paper, it might well be that one element in these repeated post-partum hæmorrhages was the existence of adhesions due to the pelvic cellulitis. He would like to ask the experience of others in similar cases.

Dr. CLEVELAND had been partly anticipated in the remarks made by Dr. Gervis. He could not conceive how adhesions formed during pregnancy could be of such strength and firmness as not to be separated when the uterus contracted after the birth of the child. In the first case related by the author the uterus, as usual, recovered its contractile power, and followed the hand on withdrawal to its natural size and position. Although the paper was of much interest, further evidence was, he thought, required before adhesions could be regarded as an efficient cause of retained placenta or post-partum hæmorrhage by mechanically preventing uterine contraction.

Dr. ROGERS thought that the thanks of the Society were due to the President, Dr. G. Hewitt, for his paper; it was a very important contribution to our knowledge of the causation of post-partum hæmorrhages. Dr. Rogers thought that adhesions to the bowels would not prevent contraction of the uterus, and such adhesion high up in the abdominal cavity might prevent due and efficient contraction of the uterus, and thus give rise to serious post-partum hæmorrhage.

Dr. HOLMAN thought it was a matter of clinical experience

that in cases where there had been peritonitis and pelvic cellulitis there was increased tendency to post-partum hæmorrhage. All practitioners must have met with many cases in which the uterus did not contract and expel the hand, as suggested by Dr. Cleveland, and in which the hand had to be left in the uterus for some time after the separation of the placenta. In such cases, if there was this atonic inert condition of the uterus, it was quite possible that the adhesion mentioned by Dr. Hewitt might assist the inert organ and aid in the production of hæmorrhage, and if the adhesions were so strong, they would not be broken down, until the uterus was pressed down by the hand externally. As to the cases of irregular contraction, it had long been the practice he thought to apply one hand over the uterus externally, whilst the other was employed in delivering the placenta, and thus a perfect knowledge was obtained whether firm regular contraction had taken place and the uterus fairly sunk in the pelvis.

Dr. Wynn Williams observed that he could not agree with the President in his belief as to adhesions being a frequent cause of hæmorrhage after parturition, for surely if it were so there should be numerous instances where such adhesions would have been demonstrated by post-mortem examination, as peritoneal inflammation during pregnancy is not at all uncommon, and as regards the first case where the broken and torn adhesions were plainly to be seen after death, it proved to his mind that they could have been little or no impediment to the contraction of the uterus, as the adhesions were completely ruptured by the contraction of the uterus or by the pressure exerted by the hand on the uterus in forcing it into the pelvis. In the following case, although the fixing of the uterus did not take place during pregnancy, still if adhesions could exert any very great influence in preventing due contraction of the uterus the fixing ought to have done so in a patient he attended last week in her first confinement, who had been operated upon by Mr. Spencer Wells for the removal of a large ovarian tumour. The abdomen was very pendulous, and the line of incision was covered over only with integument. From the want of power and in part also to the fact of the uterus being fixed by means of the pedicle of the removed ovary, nature appeared to have no power to force the uterus and head of the child fairly into the pelvis, and delivery had to be completed with the long forceps, which was done without much difficulty. After the delivery, or rather during the delivery of the child, it was quite impossible to force the uterus down into the pelvis by following the birth of the child with the left hand on the abdomen. After waiting what was considered a proper time for the expulsion of the placenta, and having administered a full dose of ergot, the left hand was introduced into the uterus, the right being placed over the fundus so as to bring the uterus

as low down as possible. The placenta was found attached to the anterior part of the uterus and was removed, the uterus readily contracting, but still, from its attachment to the pendulous abdomen, as before stated, incapable of being pressed down into its usual position in the pelvis. Now in this case there was almost less blood than usual lost. Nothing untoward occurred but a slight ulceration of the integument over the stump of the pedicle. He thought that the fatal hæmorrhage in the cases related might possibly have been prevented had recourse been had to a plan which he was in the habit of adopting,—after the introduction of the hand into the uterus, &c., &c., the passing by the side of it a sponge saturated with a solution of tincture of perchloride of iron, and sponging the walls of the uterus with it.

Mr. SPENCER WELLS said that in Dr. Williams' case the tumour had been enormous, and distension of the abdominal muscles might account for feeble expulsive power. He had upwards of twenty cases of childbirth noted after his ovariotomy cases, and in none had uterine adhesions led to any unusual difficulty. But such adhesions certainly might have such an effect, —for Sir J. Simpson had recorded a case where the pedicle of an adherent fibroid outgrowth had been ruptured by the uterine contractions; and he (Mr. Wells) had seen a patient with Dr. Cumberbatch where fatal strangulation of adherent intestine had been so produced after labour.

Dr. ROGERS would not allow the case adduced by Dr. Williams to be parallel in any way to those of the President, and could not, therefore, be held to contradict the facts stated in the paper. Dr. Williams' case was simply one of adhesion of one of the broad ligaments of an unimpregnated womb low down to the abdominal wall. Such adhesions did not of course prevent the normal enlargement and expansion of the uterus when impregnated, and by no possibility could it prevent the subsequent natural contraction on labour coming on.

Mr. Spaull said he rose encouraged by the invitation of our President, to say how much he had been interested by the reading of the paper, and no doubt the members present had been equally so; but it brought vividly to his recollection a case in his own practice bearing on the point. He was engaged to attend a woman who had during her pregnancy several attacks of peritonitis, which had caused her considerable anxiety, and she feared she should not get over her confinement. She was very large when her labour commenced; it proved to be a case of twins. In due time she was delivered of both children, and the placenta was removed without any difficulty; but after a short time there was a gush of blood, as if from a powerful forcing pump. Cold application and pressure was applied, but without effect. There was a second gush, and a third; and she became prostrate, and

fainted; still there appeared to be a stillicidium going on. I introduced the hand to remove any coagula, but failed to produce contraction. The attendants thought her dead. The husband was sent for. I feared she would die. I then remembered I had been reading a few days before the advice given by an Irish practitioner,* to use the internal application of spirit. I had no perchloride of iron with me. I asked for some gin, and having diluted it with about half water, I took a cloth well wetted with the spirit, and introducing the hand and arm, I washed the whole interior of the uncontracted uterus; and finding this stimulus was effectual, I left the cloth within the cavity to act as a plug. The hæmorrhage ceased; and in four days the cloth was taken away, without any recurrence; and the patient very slowly but satisfactorily recovered from her anæmic condition, and I believe is still living. *Obs.*—I cannot help thinking her previous condition had something to do with this, causing the uterus to relax and overcome its contractile efforts. Probably it was peritoneal adhesions to the wall of the abdomen of the upper part of the fundus uteri.

The PRESIDENT observed, in reply, that adhesions such as those described co-existing with a feeble condition of uterus would present a combination of circumstances highly favorable to hæmorrhage. It was difficult enough sometimes to get the uterus to contract at all, but if drawn upwards or restrained by tough adhesions the difficulty would be greatly increased.

The PRESIDENT exhibited a form of bead suture for perineal operations which he had used, and which was less likely to lead to sloughing of the enclosed parts than the quill suture ordinarily employed. Round vulcanite beads, $\frac{7}{16}$ in. in diameter, and perforated for the wire, constituted the suture.

Dr. MEADOWS bore testimony to their value.

Dr. ROUTH thought they might in practice prove disadvantageous, as in chronic cases of laceration he liked to see a little sloughing in the trails of the deep sutures, as it made the new perineal cushion more firm and durable and thicker.

* I think Dr. Churchill.

JUNE 2ND, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—46 Fellows and 10 visitors.

The following gentlemen were elected Fellows of the Society:—Mr. Tregenna Biddulph Goss, of Bath; Dr. John T. Griffith, Camberwell; and Dr. C. Dudley Kingsford, Upper Clapton.

The following gentlemen were proposed for election:—Mr. Richard Cox, Dr. W. B. Geikil, and Mr. F. W. Lowndes.

The PRESIDENT gave some particulars of the recent deputation to the Home Secretary. He stated that the Council of the Society had waited on Mr. Bruce on May 11th, in order to represent to him the necessity for removing a defect in the constitution of the General Medical Council, arising from the absence therefrom of teachers or authorities on the subject of Obstetric Medicine. A memorial had been drawn up in accordance with the resolution passed by the Fellows of the Society, at the Annual Meeting in January last, and had been presented to the Home Secretary. The deputation was kindly introduced by Dr. Lyon Playfair, M.P., and accompanied by several other members of Parliament. He had further to state that the representations they made were carefully listened to by the Home Secretary, and he believed

that the attainment of the object the Society had in view would be materially advanced in consequence of the interview.

The memorial was as follows :—

1. The Obstetrical Society of London begs leave most respectfully to invite the attention of Her Majesty's Secretary of State for the Home Department to the grave defect in the constitution of the General Medical Council, resulting from the want of adequate representation in that body of Obstetric Medicine.

2. The General Medical Council is constituted of seventeen representatives, elected by the Universities, the Colleges of Physicians and Surgeons, and the Apothecaries' Society; by six nominees of the Government, and by a President elected by the Council itself.

3. Owing to the constitution of the governing bodies of the Universities and Colleges, these bodies have always elected representatives who neither teach nor practise Obstetrics.

4. Amongst the members nominated by the Government there is not one who teaches or practises Obstetrics.

5. The result is that at the present moment the General Medical Council does not contain a single member who has ever been a public teacher of Obstetrics, and only two or three members who actually practise Obstetrics.

6. The position and claims of Obstetric Medicine in reference to the examining boards and licence to practise are very unsettled; the provision of competent midwives for the poorer classes and the public services is in the highest degree unsatisfactory. The encouragement of Obstetric Science and the regulation of Obstetric practice are duties of undeniable importance to the public interest.

7. Your memorialists submit that these duties can hardly be efficiently discharged to the public interest, or so as to command the confidence of the great bulk of

the profession, by a body from which teachers and practitioners of Obstetrics are practically excluded.

8. Your memorialists, therefore, earnestly pray that the constitution of the General Council may be so remodelled as to make due provision for the appointment of members conversant with, and capable of informing the Council upon, matters relating to the science and practice of Obstetrics.

Signed by Sir Charles Locock, Bart.; Dr. Graily Hewitt; Dr. Gream; and other Members of the Council and Fellows of the Society.

Dr. ROUTH exhibited a new Vesico-vaginal Speculum-Holder made by Mr. Coxeter. An instrument for the same purpose had been devised by Mr. Weiss, at Dr. Savage's instigation and under Dr. Rogers's direction, which was exhibited by Mr. Wells as used by him before the British Medical Association. This was a very ingenious instrument, but it had certain disadvantages which he thought did not apply to the instrument now shown. In Weiss's instrument there were, in fact, but two movements allowed, one upwards and downwards, and the other forwards and backwards. In this one there were four movements, a circular motion of the speculum, and one from side to side, as well as the two possessed by Weiss's. Its construction was also much more simple. These two additional movements enabled a more ready exposure of the fistula for operation, if not in the middle line, which, in some cases, was most important. Another advantage in this instrument was that the buttock piece was flatter and wider, and so more comfortable to the patient. Again, by means of two straps, it could be used when a woman was on her side. Lastly, owing to the movement upwards and downwards being effected by a slide instead of a slow-working screw, it was most readily applied and removed. He (Dr. Routh) had also added another portion to it, by which an ordinary speculum could be fixed *in sitû* in lieu of Sims's speculum, and which could, when so

placed, play or be fixed in all the four positions before named. In private practice, with lack of assistants, for purposes such as the application of the actual cautery or leeching, &c., its advantages would be at once recognised. One other reason he had for bringing it before the Society was, not only was it more simple in construction, but less expensive.

Dr. BARNES described and demonstrated a New Method of Embryotomy, by which a mature fœtus could be extracted through a pelvis measuring not more than an inch in the conjugate diameter. He observed that the rule of conduct justifying embryotomy was the same in extreme cases of deformity as in the slighter cases. In the case of a pelvis contracted to three inches in the conjugate diameter, it was justified by the presumption that by it the mother was saved from danger. So in the case of contraction to two inches or one inch it was on the same principle justifiable. The difficulty was to carry out the proceeding with reasonable safety to the mother. He had long felt that if the problem how to extract a mature fœtus through a pelvis narrowed to one inch, without injuring the passages, were put to any of our great engineers, a solution would be found. He felt that the problem ought to be solved, so that the Cæsarian section, if not eliminated, might at any rate be still further restricted.

Van Huevel's forceps-saw cut up the child's head by making a chain-saw travel up from the shanks of the forceps blades. But in extreme distortion there was not room for the blades to pass. His (Dr. Barnes') operation consisted in passing a loop of strong steel wire over the head by means of Weiss's écraseur, and then making sections. Dr. Barnes showed the operation. He regretted that a pelvis having nearly two inches in diameter had been sent instead of one with only an inch, and that he had only been able to procure a seven-months' fœtus; but the operation was quite feasible under the conditions he had stated. Dr. Barnes first perforated the head; then introduced the crotchet to steady it;

then passed the wire loop into the uterus, which could be done by compressing it; when the loop was sufficiently high, by removing the compression it opened by its elasticity and was made to seize the head in its circumference at the occipital end; then by working the screw the wire made a clean section of the head, taking off all the posterior part; this part was then removed by craniotomy forceps; then the wire was reapplied in the longitudinal direction of the head, seizing under the jaw and ear, and another section made through the base of the skull. This was commonly enough. The remains of the head were then seized by Dr. Barnes' craniotomy forceps and easily drawn through the pelvis. Then there was the body, often opposing great difficulty. This he overcame by perforating the chest; by hooking the crotchet in the axilla of one arm, to draw it down within reach of the embryotomy scissors to cut off; then the chest-walls were cut up by the embryotomy scissors and drawn through the pelvis, either cutting off the other arm previously or not.

The operation had this great advantage over the old crotchet and craniotomy forceps operations—that it involved little or no pressure, or contusion, or dragging, upon the uterus or other soft parts; the wire buried itself immediately in the head, and no bulky instruments or manœuvres risking bruising the soft parts were necessary. In answer to Dr. Tyler Smith, he said he had not yet performed the operation on the living subject.

Dr. CLEVELAND remarked that in estimating the dimensions of a pelvis through which a child could be extracted, sufficient regard was not paid to the probable size and osseous development of the latter. Thus, though it might be comparatively easy to drag a small immature fœtus, such as that just exhibited, through a narrow passage, it would be very difficult, or almost impossible, to do the same with a firmly ossified child weighing eight or nine pounds. He thought that in cases of high distortion, after removing the bones of the cranium, the real difficulty had still to be encountered, for, in a recent case of the kind to which he alluded, he had, after long perseverance, removed every particle

of the skull, as well as all the cervical vertebræ, and was then foiled in the attempt to bring down the rest of the body within operative reach. After death the child was found to weigh about eight pounds without its head, and the shoulders, when compressed into as small a space as possible, were out of all proportion to the size of the pelvic inlet.

Dr. BARNES could but repeat his conviction, based upon experience, that he could bring not only the head, but the trunk of a mature fœtus, through with nearly as much facility and accuracy as the Fellows had seen done in the experiment performed before them.

Dr. J. BRAXTON HICKS considered we were indebted to Dr. Barnes for showing another method of reducing the fœtal head. He had demonstrated completely the possibility of the plan, so far as the head was concerned, in a manner entirely new. With the various plans of late developed which were at command he considered there were very few cases in which the head itself would give insuperable trouble; but he agreed with Dr. Cleveland so far as to look now upon the body as the most difficult element in the extremely severe obstacles. In experiments made on very small pelves he had found it by far the greatest difficulty, notwithstanding reduction by perforating, cephalotribe, and crotchet. He could not at present see how the wire could be passed over the body; still it was possible a mode may be discovered; so much has been done that we ought not to despair, but to be continually advancing.

The PRESIDENT observed that the value of the procedure suggested by Dr. Barnes must of necessity be tested by experience, but one thing at all events was certain—viz. the originality of the operation, and for this Dr. Barnes deserved the greatest credit.

CASE OF DOUBLE MONSTROSITY.

By J. F. ROGERS, Esq., L.R.C.P. Edin.,
SURGEON TO THE ROYAL MATERNITY CHARITY.

(Communicated by Dr. ROBERT BARNES.)

THE mother, a healthy primipara, æt. 23, an Englishwoman; works as an envelope folder; has been married twelve months; menstruated a week after marriage, and

twice subsequently at the regular periods. Was always weak, nervous, and excitable before marriage, but her general health improved afterwards. The movements of the children first became perceptible to the mother during the seventh month of pregnancy.

She was confined on the 17th May, at 10 p.m. On the morning of that day she awoke as usual about six o'clock, and whilst in the act of dressing herself, without any previous warning of any kind, the liquor amnii escaped. Labour pains commenced an hour afterwards, and continued regularly throughout the day. I was sent for at about 7.30 p.m. I found the patient a tall, well-made woman, very cheerful; uterine action was somewhat feeble and irregular. On examination I found what I then considered to be an ordinary case of foot presentation, one foot being in the vagina, and the os almost fully dilated. The pains not being strong enough to be of service to her, I gave her a small dose of secale, which soon caused the uterus to act more powerfully and regularly.

No perceptible improvement being made, I used gentle traction, by which means I managed to reach another foot, continued to pull gently but without any satisfactory result. I now passed my hand into the vagina to ascertain whether I could find any cause to account for the difficulty, when I felt another foot. It did not occur to me until now that the two feet which first presented were right ones, the the toes of one being pointed towards the symphysis, and the toes of the other towards the coccyx of the mother. On making this discovery I immediately tried to return one foot, so as to bring down the left foot corresponding with the right one already down, but did not succeed in doing so.

I now brought down the third foot, and by using some force managed to bring the nates and loins of one child well down into the vagina. I could then feel the band by which the children were united.

Some difficulty was experienced in extricating the shoulders, but by continued gentle traction and getting down two arms I succeeded in doing so. Here I discontinued

further traction, and allowed nature to complete the delivery, taking care, of course, to draw the bodies of the children well over the abdomen of the mother, so as to prevent the head becoming fixed above the brim of the pelvis. By this means the head of the posterior child first passed through the pelvis, and thus they were delivered with comparative ease.

The bodies passed through the pelvis in the oblique diameter.

The twins (both females) were stillborn, weighed about eight pounds, and measured sixteen inches, and sixteen and a half inches. All the external organs were perfect; they were united to the extent of five inches, and the uniting band (which was composed of cartilage skin, &c.) extended from the upper extremity of the sternum to the navel, into which one umbilical cord common to both entered. The head of each child was flattened on one side, *i.e.* on the sides which were in contact, and the diameter of the two when laid together was eighteen inches. The umbilical cord was twenty inches long, and about the same thickness as in an ordinary birth. There was but one placenta, and this was unusually large and heavy. I had no opportunity of weighing it. The perinæum was but very slightly lacerated, in fact not more than very frequently happens on first labours.

I now beg to direct your attention to what appears to me to be the remains of a second umbilical cord. It is about two inches long, and is attached to the navel about an inch below the other one. If it is what I suspect it may be interesting, as throwing some light on the question, as to whether the union in cases of monstrosity takes place at the time of conception, or some time afterwards. Until very recently this was a debatable subject, and I am not aware that any decided opinion has been arrived at on the question.

Supposing my conjecture to be correct, that during the early periods of pregnancy two cords existed, I think I am fully justified in coming to the conclusion that these were originally true and separate twin conceptions, but that the membranes which ought to have separated them were

imperfect; the bodies being brought in close contact with each other, and owing to the strong formative power existing in the vascular system of the fœtus, the parts became united by adhesion. I may add that the mother has never seen the "Siamese Twins," but has frequently noticed drawings of them; she says that about eight or nine months before her confinement she read an account of them in the newspapers, but that to the best of her recollection no particular impression was made on her mind at the time.

The mother is now convalescent, having had scarcely a single unfavorable symptom since her confinement.

Dr. PLAYFAIR said that Dr. Rogers' paper was valuable because, although cases of conjoined twins were by no means rare, an accurate description of the mechanism of delivery was rarely given. This particular instance well illustrated a remark he had made in a paper on the subject in the eighth volume of the 'Transactions,' that presentation by the feet was by far the most favorable that could be met with. For not only did this allow us to diagnose the cases more readily, but the bodies were able to pass through the pelvis without much difficulty, and then, by lifting them well over the abdomen of the mother, one of the heads became engaged in the cavity, while the other remained *in utero*. If, therefore, we are able to determine the nature of the case soon enough, we should convert it into a footling presentation by turning. If one of the hands passes first, it is necessary that the body belonging to it should undergo a process of spontaneous evolution, involving a very tedious and hazardous termination.

REPORT OF THE INFANT MORTALITY COMMITTEE.

THE PRESIDENT stated that the paper about to be read was of a peculiar character. Some time since Dr. Farr, of the Registrar-General's office, communicated to the Society his desire to obtain information as to the treatment and management of infants in this country, with a view to ascertaining the extent and causes of infant mortality, and requested the Society to use the resources at its disposal for obtaining this information. His request was at once acceded to. The Council appointed a committee on the subject, which since then had been at work. A series of questions was drawn up, printed, and a copy sent to each Fellow. A considerable number of answers had been obtained, and Dr. Gervis, one of the hon. secs. of the Society, had, at the request of the committee, drawn up an analysis of the replies thus elicited, and the paper now to be read was the analysis in question. The Council had decided to bring the matter thus far advanced before the Society, the subject being a highly important one, and in order also that those Fellows of the Society who had not yet contributed information on the subject might be induced to do so.

REPORT.

THE Committee appointed by the Council of the Obstetrical Society to investigate the causes of Infant Mortality, in presenting to the Fellows the result of their inquiries, while, on the one hand, they must express some regret that they were not favoured with a reply to their circular from a larger proportion of the gentlemen to whom it was addressed, on the other hand, cannot but congratulate themselves and the Society on the fact that through the medium of this investigation a very considerable addition has been made to our knowledge of the circumstances attending

the birth and early life of infants in various parts of the country, and many valuable suggestions offered from which they trust by the influence of this Society on the public mind much benefit may ultimately accrue.

The first question asked related to the proportion of births attended by medical men and by women respectively, to the amount of instruction possessed by the women, and to the mode of procedure adopted with the infant immediately after its birth. From the replies given the following general statements are deduced,—that among the poor population of villages a large proportion varying from 30 to 90 per cent., are attended by midwives. Thus, in Flegg-Burgh, in Norfolk, with a population of 554, Mr. Waller reports that 30 per cent. are attended by midwives. In Gringley, near Bawtry, Notts, with a population of 874, Mr. Raynes reports the number as 46 per cent., and at Bromyard, in Herefordshire, population 1,300, Mr. Marley reports that as many as 90 per cent. are attended by midwives. In the small non-manufacturing provincial towns, on the other hand, attendance by midwives prevails to a much less extent, with a few exceptions. The large majority of the returns puts attendance by midwives in towns of a population of from 6,000 to 10,000, as varying from 5 to 10 per cent., and in some few as not occurring at all, *e. g.* in Lewes, with a population of 3,716, there is stated to be none. In Long Sutton, however, with a population of 6,124, Mr. Ewen reports that attendance by midwives occurs to the extent of 26 per cent.; in Altrincham, in Hampshire, with a population of 6,628, Mr. Blease reports that attendance by midwives reaches as high a figure as 53 per cent. In the large provincial towns, and especially in the large manufacturing towns, attendance by midwives among the labouring population occurs in almost as large a proportion as in the agricultural villages. Thus, in Glasgow the return is 75 per cent., in Coventry, 90 per cent. In Leeds, Sheffield, Birmingham and Bury, the proportion is not stated in figures, but stated either to be large or the larger, in comparison, *i. e.* with attendance by qualified practitioners. In Wakefield, however, with a population of

23,000, Mr. Fowler reports that, while among the Irish, attendance by women prevails to a very large extent, among the English nearly every case is attended by a medical man. In Edinburgh, as reported by Dr. Mathews Duncan, attendance by midwives would appear to occur to but a trifling extent. Lastly, from London the reports vary accordingly as they come from the east or west end, or from the suburbs. In the east of London, as Stepney, Barking, and Stratford, it would appear that from 30 to 50 per cent. of the poor are attended by midwives. In the west end, on the other hand, the proportion is very slight; thus, Mr. Curgenven, Dr. Bloxam, and Mr. Gaskoin report that it amounts to 2 per cent. or even less. In a suburb such as Wimbledon Dr. Payne states the proportion of midwifery attendance by women to average about 5 per cent.

To the question, Are the women instructed? answers in the negative have been received from all parts of the country, with the exception of Glasgow and Sheffield, where Dr. Yeaman and Mr. Hime respectively report a certain amount of education to exist among the better class of midwives. From several districts the replies indicate not merely a want of any special education, but gross ignorance and incompetence, and a complete inability to contend with any difficulty that may occur. In London, on the other hand, it would appear that there are many women practising midwifery who have received a certain amount of instruction at various institutions, but these, although fairly competent in ordinary cases, are also quite unequal to any of the emergencies of Obstetrics.

Under the third section of the first question,—that relating to the mode of procedure with the infant after birth,—nothing of much new interest has been ascertained. The ordinary treatment of the umbilical cord appears to be generally carried out—the only variety being in the length of cord allowed to remain, this varying from one inch to three inches. In reference to the binder fastened around the infant's abdomen, Mr. Curgenven remarks that it is often much too tight, so much so indeed as not infrequently to induce convulsions.

In country districts the custom of giving some aperient to the infant shortly after its birth appears still to be very prevalent, less so in the larger towns, still less in London. The aperient varies much in kind. Butter and sugar, gruel, and castor oil are the most common; but in Chelmsford a favourite dose would appear to be milk and sugar; in Sheffield, treacle; and in Altrincham, a teaspoonful of cold water. No report has been received of any great delay being common in putting the child to the breast. Twenty hours is the longest period mentioned as being allowed to elapse.

The second question has reference to Lactation and Feeding. Among the married poor suckling is evidently the rule, and a large amount of testimony is borne to the fact that it is often unduly protracted, even to eighteen months and two years, for the most part with the hope that it may prevent a rapid recurrence of pregnancy. Illegitimate children among the poor, on the other hand, are rarely suckled; and this, whether entrusted to the grandparents, as is often the case in the manufacturing towns, or put out to nurse by the day, or altogether, as is common in London. These are nearly always wholly brought up on artificial food. Among the married poor also it appears nearly universal to give the child artificial food as well as the breast, and that from a very early date. In both cases, *i. e.* where it only supplements lactation, and where it altogether replaces it, the food is generally improper, either in quality or quantity. It consists for the most part of bread soaked in water or milk, and sweetened, arrowroot, sago, or corn flour, baked flour and biscuit food; all generally of too substantial a consistency, and too exclusively farinaceous.

Among the upper classes it would appear that the tendency for mothers not to suckle their children is on the increase; but here either wet nurses are employed, or the food during the first few months of its life being much more judiciously arranged, so as to contain a much larger proportion of diluted cow's milk, and a much smaller proportion of the farinacea, the injurious results of improper feeding are not seen as among the lower classes. Mr. Curgenven and others remark

that a large number of women in London fail to properly suckle their children through a deficient secretion of milk.

From the answers to the third question, which relates to the mode of life (apart from the subject of their food) adopted for the infants in various districts, no fact of new importance has been elicited; but much that was previously known has been confirmed, and much that is interesting narrated.

Both in agricultural and manufacturing districts it seems to be the custom among the poor to let the infants live to a very large extent in the open air—under the care of elder sisters, often, however, little more than infants themselves; and this out-of-door life they lead would appear to compensate to a considerable extent for the smallness of their rooms at all events by day. In the night, however, the want of due ventilation in the crowded sleeping rooms is a serious evil, and prejudicially affects not only the younger members of the family, but also their seniors. Sleeping is encouraged to the utmost attainable extent, and there is too prevalent a tendency to look upon waking as an indication for food, and should it fail in securing renewed sleep, for cordials, such as gin, or narcotics, such as syrup of poppies, or paregoric. Another plan much adopted to quiet infants is to allow them to remain in their cradles, and to keep them sucking at the bottle for a time much beyond that occupied by the mere meal. The effect of this upon gastric digestion is probably, to some extent at all events, prejudicial, and has attracted the attention of some writers under the head of "fruitless sucking." Washing among infants appears to be fairly attended to; they get some sort of a wash morning and evening, and generally in warm water. When they pass, however, out of the limits of infancy, the care taken of them in this respect gets much less, though it may be here remarked, and this remark equally applies to all the details of infant life, that the firstborn child, as a rule, gets much more care and attention throughout its entire infancy than say the seventh or eighth. As regards dress, the tendency certainly is, both in summer and winter, but especially in winter, to err on

the side of insufficiency. Considering the comparative feebleness of the circulation of an infant, and the changeableness of this climate, after it has arrived at the stage of its existence when its clothes are shortened, the scanty nature of its dress is an unquestionable source of internal congestions and consequent disease.

The question of food was chiefly considered under Question II, but a few particulars are here added. Even where suckling is more or less carried out, as has been stated, it appears to be very general to give some artificial food as well, and stress has been laid upon the too exclusively farinaceous character of that food in the early weeks of the child's life. But in the latter months of the first year errors in diet are even more flagrant, and it is no uncommon thing to hear from the mother, in reply to questioning, "It has, sir, what we have," and on minute inquiry what they have proves to include vegetables, uncooked fruit, meat, salt fish, cheese, heavy pastry, and beer. Under these circumstances it is little to be wondered at that bowel and mesenteric disease, followed by general wasting, is so alarmingly prevalent. Indeed, this question of improper feeding must be held accountable for a very large proportion of the excessive infant mortality which prevails.

On the last topic touched upon in this question—the administration of cordials, medicines, and spirits—a very large amount of testimony comes from nearly every quarter (the chief exception being the agricultural villages), that it is a practice extremely prevalent among the poorer, and especially the operative classes. The only exception to this statement comes from Wakefield, and this may be more apparent than real, where Mr. Fowler reports that systematic dosing with anodynes does not prevail. In all the other large towns the general tenor of the reports is that it is "enormous," and many particulars are given as to the quantities sold by chemists and druggists. Thus, even in a small town like Long Sutton, in Lincolnshire, with a population just over 6,000, one chemist alone sells twenty-five and a half gallons

of Godfrey's Cordial annually, and another in the same town six imperial pints weekly.

Besides Godfrey's Cordial, tincture of opium, paregoric, syrup of poppies, and Steedman's Powders are the favourite medicines. As regards the administration of spirits, there is also too much reason to fear that, except in country villages, which in this as in some previous matters appear again to have the advantage, it largely prevails. The spirit chiefly given the children is gin, and in some cases doubtless with the idea of relieving flatulence, but in more with the hope of obtaining its narcotic effect.

The fourth question relates to the immediate effects of putting children out to nurse, and from the answers received it would appear that, except in the case of illegitimate children, and the children of the poorer class of millworkers, this is not a very prevalent practice. In the agricultural districts it scarcely prevails at all. In the northern manufacturing towns the wages of the majority of the operatives is sufficiently good to enable them, not only to have houses of their own, but to maintain their wives at home; when, however, a girl, who is a millworker or a domestic servant, has an illegitimate child, it is almost invariably put out to nurse, and its temporary guardians very frequently are the grandparents. It is rare in these towns for a woman to have more than one nurse-child to take care of. Baby-farming, in the sense of an accumulation of babies in one room or house, does not, indeed, out of London, appear to be much carried on; where it is, in London and its neighbourhood, the testimony is invariable as to its prejudicial effects on the infants. Thus, Dr. Payne, of Wimbledon, writes, "A nursery of three or four children never does well; the air of the room becomes foul, and they all droop and fall away in flesh, even with the best food, attendance, and cleanliness." And Mr. Curgenven states that of the illegitimate children put out to nurse in London, 80 per cent. die.

From answers to the fifth question it would appear that in the country there is much less ill-treatment of children,

desertion, concealment of birth, and infanticide than in London. In the case of country villages and towns this would appear partly to arise from the willingness of the father to marry the mother of the child where possible. Indeed, in many parts of the country it is the invariable custom for the marriage ceremony not to be sought until advancing pregnancy renders it desirable, and it is often postponed until after the confinement has taken place, as by the infant perchance being stillborn, the chief reason for marriage is removed. Such at all events is the case in many agricultural and mining districts. In the large manufacturing towns this comparative absence of the direct ill-treatment of children is largely due to the absence of shame with which illegitimacy is regarded, it being very common, as mentioned under the last section, for one or other of the grandparents to attend to the illegitimate child or children of the daughter. Of indirect or unintentional ill-treatment, however, there is everywhere much to complain of—ill-treatment, *i. e.* arising from the poverty, ignorance, and intemperance of the parents, from the want of comforts and even necessaries in their homes, and from consequent exposure, insufficient feeding, and neglect. There is one variety of ill-treatment, or what is equivalent to it, which deserves especial animadversion, and that is the neglect which appears to prevail in some towns to call in medical advice in the case of the illness of the infants until medical advice is useless. Thus, Mr. Fowler, of Sheffield, writes, "It is quite common for women to defer sending for medical aid, when their children are ill, until it is almost too late. They do this quite consciously, and say to the doctor, 'Little un's very bad; you can't do no good, but we want you to see un in case ought should happen, so as you may give us a paper.'"

While, however, the intentional ill-treatment of children appears to be but little prevalent, their desertion, especially in the case of illegitimate children, appears much more so. Desertion of families by fathers would appear to arise from intemperance, poverty, and immorality; by mothers it is much

rarer, and arises chiefly from immorality, *i. e.* from the forming of an illegal connection with another man. Desertion of illegitimates in London is frequent; the mother being anxious to be rid both of the pecuniary burden connected with the support of the child, and of the evidence of her guilt. She frequently, therefore, leaves the child with the woman who undertakes to nurse it, and the ultimate lot of the child so deserted is either death by slow starvation and neglect, or the workhouse. The same tendency exists in the large provincial towns, but in the smaller ones women cannot move from one part of the town to another without its being known, and unless they leave the town altogether it is much more difficult for them to abandon their children. The same causes too, which in the manufacturing towns influence the question of ill-treatment, influence also the question of desertion, *i. e.* on the one hand the high rate of wages obtained by the millworkers, and on the other the shamelessness with which illegitimacy is regarded. An anecdote narrated by Mr. Fowler, of Wakefield, well illustrates this. A woman was asked on her applying for medical aid in her approaching confinement how many children she had had before. She volunteered the following: "Let's see—first wor a chance un; second wor a chance un; third wor all right; this is fourth." Another woman applied to the parish for relief on the birth of her sixth bastard. It was known that she was herself a bastard, and as her mother was there, the question was put to the old lady. "Have you ever had any illegitimate children?" "Yes, your honour, six." "Are you not ashamed of yourself?" "Ashamed, no! I've worked for 'em, and 'ave kep 'em; why should I be ashamed?"

With respect to concealment of birth and infanticide the replies from the country without exception intimate that neither of these crimes are common. Thus, Dr. Holman, of Hurstpierpoint, reports that he is not aware of any case of infanticide having occurred in the town within his experience, and in twenty years but one case of concealment of birth; and Mr. Ewen, of Long Sutton, says that concealment of birth is very uncommon, and that he has heard of but three

cases of infanticide in forty years, and more or less similar testimony is borne by all our country Fellows who have replied. On the subject of infanticide in London we are unable from the replies received to give any adequate report. In answer to the question. Is infanticide common? nearly every gentlemen has simply written "no." Yet though this doubtless represents accurately enough the infrequency with which the Fellows of the Society, in their own practice, are brought into contact with infanticide, the reply of Dr. Bloxam probably more nearly represents the truth. Dr. Bloxam writes, "Judging by the frequency of coroners' inquests on cases in which the child has evidently lived, and death said to occur from apnœa, I should say yes." Probably a special return on this subject requested from the medical officers of the police force would yield statistics of more exact value.

The first section of the sixth question refers to the annual average of illegitimate births known to the Fellows of the Society in their respective districts, and asks information as to the number of illegitimate children who live over one year. In answer to this question the majority of the gentlemen who have replied have given the number known to them personally, and this would obviously be influenced much by the character and extent of their own practice. Thus, Mr. Marley, of Padstow in Cornwall, writes that out of 233 births attended by him in the preceding year, 22 were illegitimate. Dr. Hewitt, of Winkfield, in five years has had but 3; Dr. Coombs, of Bedford, 7; Mr. Curgenven, 6; Dr. Payne, of Wimbledon, 5; Mr. Hall, of Barking Road, 2; and so on. A few gentlemen give averages; thus in the practice of Dr. Mackinder, of Gainsborough, the illegitimate births averaged 9·9 per cent.; of Dr. McVeagh, of Coventry, 5·46 per cent.; of Dr. Blease, of Altrincham, 4 per cent. Other gentlemen send particulars of illegitimate births in the towns irrespective of their own practice. Thus, Mr. Fowler reports that in Wakefield from January 2nd, 1863, to January 2nd, 1868, there were 197 illegitimate births registered; in Sheffield, Mr. Hime reports that from 1863 to 1867 inclusive, there

were 845 applications made by mothers of illegitimate children to the police, and that out of 510 births in the workhouse in 5 years 303 were illegitimate.

Dr. Yeaman, of Glasgow, reports that in the Glasgow Lying-in Hospital during six months there were 195 deliveries, of which 145 were illegitimate, and that in the same period of 318 outdoor cases 36 were illegitimate. At Hurstpierpoint Dr. Holman reported that in five years 1253 births have been registered, of which 49 were illegitimate. Mr. Price reports that in the Leeds Gaol out of 29 births in five years, two thirds have been illegitimate.

To the second portion of this question some more exact replies are given. In Wakefield the report states that 26·22 of the illegitimate children die under one year; in Coventry, 40 per cent.; in Padstow, 50 per cent.; in Bawtry, Mr. Raynes states that the average number of illegitimate births during the last five years has been 8, and that all die under one year; Mr. Snell, of Stepney, says that a great many illegitimate children have been under his care, without specifying numbers, and that all have died under one year. Of the 6 cases known to Mr. Curgenven all have died under one year of age; Dr. Mackinder, whose average is just 10 per cent., says very few live over a year; on the other hand, Dr. Hewitt, of Winkfield, says of the three cases which have occurred in his practice all the children are alive and well; Mr. Waller, of Flegg-Burgh, Norfolk, writes—"Although in this county as regards illegitimate births we stand highest but one, *i. e.* Cornwall, the lives of illegitimates in my district at all events are as good as of legitimates."

From data such as these not given on any common basis, it is difficult satisfactorily to generalise; still on the whole it would appear with respect to the latter of the two inquiries that in spite of such a striking exception as Padstow, in the strictly rural districts the lives of illegitimate infants are as good as those of the legitimate, that in the manufacturing towns an average of at least 35 per cent. die under one year of age, and that in London we should not be far wrong in

placing the per-centage at a much higher figure, probably about 75 per cent.

And with respect to the inquiry as to the frequency of illegitimacy, the returns from Norfolk and Cornwall respectively would appear to confirm the previous impression which obtained as to their pre-eminence in this respect among English counties. In questions of health, rural districts have, so far as our replies extend, on the whole come out well, indeed the best; but on this question of illegitimacy, country towns would appear to have the advantage of them, and even probably London itself. It is, in fact, difficult to decide on this point between sparsely populated agricultural villages and densely populated manufacturing towns. From Scotland the only answers received have been from Edinburgh and Glasgow, and it would appear from them that, as in the case of the English metropolis, so in the case of the Scottish, it has somewhat the advantage over the large manufacturing towns, of which Glasgow may be taken as the representative.

The last topic of the circular, and perhaps the most important, treats of the possibility of preventing so large a mortality among infants, and invites suggestions from the Fellows on the subject. It may be as well to arrange these suggestions under two heads; the first including those suggestions in which all agree; the second those which are advocated by particular Fellows. The first deal chiefly with the questions of food and hygiene. All agree in the importance of mothers suckling their infants for a certain number of months, and in the mischief arising from the practice of giving infants of but a few weeks old solid farinaceous food, not to speak of still coarser fare. Where the mother cannot suckle, whatever the cause, no food beyond milk and water, provided the milk be of a good quality, should be given the infant for at least the first three months. All lay stress upon the importance of improving the education and as speedily as possible the dwellings of the working classes:—the education, so that the infants may not continue to be in so great an extent the victims of ignorance, tradition, and prejudice in the

matter both of their food and hygiene; and the homes, so that the effects of overcrowding, want of air and light, and imperfect drainage may be remedied. Abstinence from the unauthorised administration of opiates to the child, and from the habitual indulgence in ardent spirits by the mother, is another point, much and generally assisted upon. Greater cleanliness, better nursing, and a warmer average dress, especially in winter, are other points of general hygienic importance much urged.

The particular suggestions made by several of the Fellows are many of them of considerable value.

Mr. Fowler, of Wakefield, urges a less lax system of burying dead infants. "If a child dies," he writes, "and the parent is conscious of neglect, she need not apply to the doctor for a certificate of the cause of death. The registrar, after asking who saw the child die, how long ill, and a few simple questions, grants a certificate for burial. Even this is not necessary; and the clergyman is bound to bury whether the certificate is produced or not. It would, probably, diminish the mortality of infants if their guardians were required to produce a medical certificate in every case, or, in default, one from the coroner. The dread of an inquest and of the obstacle to burial would eventually make parents more anxious at least to call in a doctor, and avail themselves of ordinary means in case of sickness."

Mr. Hime, of Sheffield, advocates the employment of trained midwives by the parish, who should attend the case for at least one week from the confinement, and not merely until the cord comes away. "I have known cases," he writes, "in which the cord has been pulled off prematurely in order to bring the attendance to an end. If these nurses were capable," he adds, "of teaching the mothers how to wash, feed, and clothe their infants, I think a great deal would be gained." He advocates also the formation of homes at which working people could leave their children during the hours of work, without any cost in the case of the very poor, at a fair remuneration in the case of better paid artisans. Lastly, he

urges the occasional careful sifting by some competent medical witness of cases of alleged sudden death in infants, in which the verdict of the coroner's court has been "found dead in the mother's arms," or "died from natural causes." He thinks that in this way the number of such deaths would be greatly reduced.

Dr. Mathews Duncan, of Edinburgh, suggests the registration of all births of children who have passed the sixth month of pregnancy, and whether born alive or dead.

Dr. McVeagh, of Coventry, suggests the appointment of a committee of the Society to draw out dietaries for infants, which might be printed by authority and widely distributed throughout the country.

Mr. Marley, of Padstow, urges the establishment of district foundling institutions.

Dr. Yeaman, of Glasgow, writes, "My idea is to make use of female visitors in connection with public dispensaries, to instruct know-nothing mothers, and see that the doctor's instructions are carried out." And with respect to the better protection of the lives of the illegitimates he says, "If the law were less frequently nullified by a maudlin sentimentality in favour of delinquents of this class, and if the father of illegitimates were compelled by law to aid more liberally, perhaps some good might result."

Mr. Heckford, of the East London Children's Hospital, urges the education of midwives, and house-to-house visitation by medical inspectors; the distribution of printed rules and recommendations with respect to the diet and treatment of children; the prevention of syphilis; the removal to state asylums of *all* illegitimate children, the father in every case being compelled to contribute one fifth of his income to the support of the child, and the mother to be held under strict supervision.

Mr. Blease, of Altrincham, inculcates the extreme importance of improving the morality of the working men, believing that intemperance and extravagance are at the root of most of the causes of infant mortality.

Dr. Payne, of Wimbledon, urges the importance of giving

ample relief to the mother whilst her infant is under one year old; this to apply both to the mothers of legitimate and illegitimate children, and in the case of the latter he further suggests that periodical inspection of them be made by medical men every two or three weeks, with power to order what food, clothing, ventilation, and disinfectants he may consider best.

Dr. Mackinder, of Gainsborough, writes, "Every uncertified death should be the subject of a coroner's inquiry. Public asylums should be more easily accessible."

Mr. Curgenven, of Bayswater, advises the instruction of mothers through ladies' committees, and the registration and supervision of all persons who receive children to nurse.

Dr. Bloxam, of Mount Street, writes, "An act is wanted to prevent the present baby-farming, to give a minimum rate of payment for nursing, to appoint a registrar of illegitimate births, and a medical staff to whom the children might be periodically brought, or who could visit when they thought fit. On leaving her lodging the mother should be bound to register her new abode; inquests to be more frequently held on deaths."

Mr. Bailey, of Thetford, with respect to the desirability of affording greater protection to illegitimates, writes—"Since the Bastardy Act passed the number of illegitimate births has greatly increased, and the obligation resting upon the mother to support the child, unless she bring proof of connection with the putative father before the magistrate, has tended to the production both of desertion and infanticide." He adds, "Would an amended act prevent such disasters?"

Mr. Price, of Leeds, advocates the establishment of properly arranged nurseries where the working classes may leave their children during the day, and for illegitimates a more efficient workhouse system, or else foundling hospitals.

Mr. Macrae, of Lewes, makes a remark on the preparation of artificial food. He says, "When the child is brought up by hand, see that the food is boiled at least three quarters of an hour instead of ten minutes, as directed for example by the sellers of Robson's Prepared Barley, and

such like preparations." He urges also the particular importance of avoiding compression of the chest and abdomen by tight bandaging.

Mr. Walters, of Faringdon, writes, "Inquests have been recently held on the bodies of two children of the ages of nine and three months respectively, in both of which cases the child's life had been insured with the view of obtaining money by its death. Cannot this *amor nummi* be turned to good account? Is it not possible to establish a Government insurance office in which the lives of children may be insured soon after birth, the insurer to obtain the benefit of the sum assured, *not* on the child's *death,* but on its reaching a certain age (to be fixed) at which it may be considered able to combat on more equal terms with the disadvantages and diseases which in younger children prove so fearfully fatal? By this means a direct inducement would be held out to all parents and nurses who choose to take advantage of it to bestow on their infants or charges additional care, in order that by their *living* they may reap the same, or greater, benefit that they now seem anxious to secure by their dying. The system of Post Office Savings Banks might, I think, be made to include this principle of insurance. It would be necessary to render illegal, in the case of infants, the present system of insuring to profit by death."

Mr. G. Gaskoin, of Westbourne Park, says, "I see often a lamentable prejudice against vaccination and considerable devastation from contagious diseases, but my experience does not suggest to me any special legislation; I should rely on the general laws of humanity."

Mr. J. E. Smith, of Hay, Brecon, advocates an improved education for young girls of all classes; and he would make the elements of anatomy and physiology as important a part of instruction as is geography.

Dr. Nicholls, of Chelmsford, writes, "The births of illegitimates should be registered within say one month, and non-registration should be treated as 'concealment of birth.' The registrar should inform a medical practitioner of the birth as soon as registered, and such medical man should

visit and report on the child at least once a quarter. The medical man should be, if possible, not the union medical officer; and his report should state name, age, whose care under, state of health, feeding, nursing, quantity and quality of food, &c. In fact, illegitimate children's lives should be the property of the State, and should be looked after by the State as valuable, and the parent or parents should be compelled to assist in the maintenance of the child as far as can be done. This quarterly medical supervision takes place already in the case of out-door pauper lunatics."

Mr. Raynes, of Gringley, Bawtry, Notts, considers that the parish clerks are not held sufficiently responsible for much of what comes under their notice; many children are said to have been stillborn who were born alive, and after death they are deposited in the churchyard without making any formal communication to the clerk.

Dr. Rayner, of Highbury, would stop the use of perambulators for children under three years old. All practitioners, male and female, to report the cases they have attended to the registrar, who might call for the reports weekly; the illegitimate would then be known and the Government could look after them.

Such are the most noteworthy and practical suggestions offered by those Fellows of the Society who responded to the invitation of the Council. It is evident, therefore, that, broadly speaking, a lessened infant mortality is to be sought, on the one hand, by an improved hygiene, and, on the other, by an improved law.

The question of improved hygiene would include not only a well-weighed statement of the typical conditions of feeding, nursing, clothing, and generally caring for infants most favorable for their welfare, but also a consideration of the means best adapted to attain this end, such as the drawing-up and distribution of standard dietaries and printed rules as suggested by Dr. McVeagh and Mr. Heckford, and the regulated education of midwives as suggested by Mr. Hime, Dr. Yeaman, and others. And on this subject, probably, much unanimity would prevail among the Fellows of this

Society. On the other question, that of an improved state of the law, more difference of opinion would probably exist not only as to the changes that may be desirable, but as to the best means of inducing the legislature to take action on the subject. Before, therefore, completing their report for Dr. Farr, the committee have thought it best to bring the subject before a meeting of the Society, that they may have the advantage of incorporating with their Report any remarks or suggestions with which they may now be favoured; and they do not hesitate to add that there are few subjects to which the Society could devote its attention and influence more usefully than that which forms the subject of the present inquiry.

After some remarks on the interesting characters of the report from Dr. Barnes, Dr. FARR said that the result of the inquiry had fully realised what he had hoped to ascertain through its medium. The treatment of children at an early age was most important, adult health depending largely upon the state of health in childhood. Infant mortality was much higher in the southern countries of Europe than in the northern. It was greatest in Italy, lowest in Norway. He would have liked to have heard more details as to the dress of infants, particularly as this report would doubtless be widely circulated on the Continent, in many parts of which bandaging was carried out to much too great an extent. He wished to return thanks to the Society for this important contribution to the natural history of the British baby.

Dr. ROGERS moved, and Mr. GASKOIN seconded, the adjournment of the discussion, on account of the wide extent and importance of the subject.

The PRESIDENT, in putting the resolution (which was carried unanimously), said he judged from the manner in which this paper had been received that the time and money expended in the production of the information now conveyed to the Society would prove not to have been thrown away. The Society had successfully inaugurated a new work from which humanity would greatly benefit.

SPECIAL GENERAL MEETING,

JUNE 21st, 1869.

Dr. Graily Hewitt, President, in the Chair.

Present—40 Fellows.

The President said—Gentlemen, this is a Special Meeting of the Obstetrical Society of London, which is called in conformity with the laws of the Society to consider a special subject, to consider a letter received from the Honorary Secretary of the Royal Medical and Chirurgical Society, together with certain resolutions referred to therein. I will now read to you the letter in question.

"*May* 28, 1869.

"*To the President of the Obstetrical Society.*

"Sir,—I have been directed by the President of the Royal Medical and Chirurgical Society to forward to you the following Resolutions which have been adopted by that Society at a Special General Meeting, and to request that you will submit them to the Members of the Obstetrical Society for their consideration:—

"I. That steps be taken to secure the Union of various Societies, now existing in London, for the cultivation of special branches of Medicine and of the Allied Sciences.

"II. That Resolutions adopted provisionally by the Royal Medical and Chirurgical Society be submitted to each of the other Societies mentioned in Resolution XII, as a basis of a scheme for effecting such Union; and that each Society in the event of its approving of the

proposed amalgamation, be requested to nominate Three Members, to form a General Committee, which shall prepare a complete scheme to be submitted to each Society for its approval.

"I beg to enclose a Copy of the Resolutions which have been agreed upon by this Society, as the outline of a scheme by which the Union proposed may be effected.

"I have the honour to be, Sir,

"Your obedient servant,

(Signed) "GEO. G. GASCOYEN,
"*Hon. Sec.*"

Together with this letter there has been sent to each member of the Society a copy of the resolutions adopted by the Royal Medical and Chirurgical Society as the basis of a scheme for this proposed amalgamation. When this letter was received it was resolved to call a meeting of the Council of the Society to take the letter into consideration. The council have carefully considered the matter, and have come to certain conclusions with reference to it which will be submitted to you this evening. Those conclusions will come to you simply in the form of suggestions for consideration, for your adoption or for your alteration and revision, or for your negation, as you may think fit. It was thought advisable that the Council should come to some definite resolutions to be presented to you this evening. Those resolutions I will now read:

(1.) That in the opinion of this Society it is desirable to effect an amalgamation of the various medical societies in London, if a suitable plan can be adopted.

(2.) That in the opinion of the Society such amalgamation can only be effected by the recognition of the principle that obstetrics rank on terms of equality with medicine and surgery.

(3.) That in order to carry out the foregoing resolutions it would, in the opinion of this Society, be desirable to form three sections in the Royal Society of Medicine, representing

the three great departments of medical practice, viz., one each for medicine, surgery, and obstetrics, and that the other proposed sections, relating, as they do, to subjects which are common to each of these, should be placed on a different footing.

(4.) That it is essential that the President of the Royal Society of Medicine should be chosen annually in rotation from the past and present presidents of the sections of medicine, surgery, and obstetrics.

(5.) That it is essential that the annual subscription of the Fellows of the Obstetrical section shall not exceed their present annual subscription of one guinea, and that there be no entrance fee.

It is unnecessary for me, gentlemen, at this stage of the business of the evening to remark at any length upon these resolutions, which express in a brief and succinct manner the conclusions to which the Council, as members of the Society, have come in reference to this matter.

I need hardly say that the present represents what may be termed a most important crisis in the history of this Society. Having existed now for a period of ten years, having succeeded to an extent which has surpassed the expectations of those who assisted in forming it, having done an immense deal of good, having forwarded the progress of this branch of medical science to an extent concerning which we have received congratulations on all sides, now is come a time when we are called upon to join with other branches of the profession in the furtherance of a scheme which appears, at all events, to be based on high principles, and to be calculated, or at any rate intended, to further the progress of medical science in general. On the one hand, we have to consider this evening whether the plan proposed or any plan that may be proposed of amalgamation with other existing societies is calculated to tend still further to our progress, or whether, on the other hand, it is calculated to detract from our present position. Succeeding, as we have done, we must, and shall be exceedingly jealous of anything

which shall appear in the slightest degree calculated to lessen our importance, or to interfere with the further development of those branches of medical science which we have so assiduously cultivafed. On the other hand, it would ill become us, at least that is my humble opinion, to interpose any obstacle—any needless obstacle to the formation of a grand medical society, such as appears to be contemplated in the union proposed.

We have, therefore, to regard ourselves, and to preserve our integrity and our autonomy. On the other hand, we have to regard what concerns the general interests of the profession. Our interests are bound up with those of the profession at large. What is good for us must be good for the profession at large; that, I think, is the broad principle which we ought to maintain in reference to the discussion on what we are now entering. With regard to the Royal Medical and Chirurgical Society, which society has initiated the proceeding, I think we ought to be exceedingly careful lest anything is said or inferred which shall in any way lead to the conclusion that that society, and a very old society now, is in any way desirous of interfering with our privileges, or of interfering with our progress. It has been necessary, however, for them to draw up a scheme for your consideration, but it by no means follows that this scheme in its entirety is to be adopted by us. In fact, I believe, from conversations I have had with different Fellows of the Society, that it is the earnest desire of the Society to enter into the consideration and discussion of this matter in the fairest possible way, on the broadest possible basis. And with reference to the other Societies which are called upon to co-operate in this fusion I think the same remark may be made. We have no desire, of course, to interfere with the efficiency of any of these Societies; we simply desire to maintain our own position with reference to them, and with reference to the profession at large.

Dr. Tyler Smith.—Mr. President and Gentlemen, I rise to-night with feelings of some embarrassment, and certainly those feelings are not unmixed with pain. In December,

1858, more than ten years ago, it devolved upon me to move a resolution founding the Obstetrical Society of London, and now it seems a duty that I should move a resolution which may possibly lead to the dissolution of that Society. When I consider the career of that Society, when I think of the vast amount of work and forethought and anxious care which went to build up that Society, I feel that nothing but the greatest feeling of duty and fitness could lead us to think of risking the advantages that have been obtained. If we look to our 'Transactions,' if we look to our meetings, if we look to the number of our Fellows, if we look to the men who have enhanced their reputations, to the men who have made their reputations by working this Society, one could not but have a feeling of regret that any alteration might take place in its constitution. But it does seem to me that a feeling exists in the profession in favour of an amalgamation of the medical societies of London into one body. We are in this position in the profession, that we have no body, no society, no institution representing the whole of medicine. If we looked for any body possessing this character, we could only apply it to the General Medical Council, and that really has nothing to do with the science and practice of medicine. It is simply concerned in rudimentary education, and in carrying into execution an Act of Parliament. It does seem to me, as I think it must to all who consider the matter, that it would be greatly to the advantage of medicine as a whole if we could have in this metropolis some great society which should stand forth as the representative of medicine in its entirety. I think that is the reason why we should approach this subject, and consider whether we cannot, without injury to ourselves and with advantage to general medicine—whether we cannot unite in forming some great medical body such as is sketched in the paper before us referring to the Royal Society of Medicine. I would have preferred the "Royal Academy of Medicine;" I did prefer it, and I had that name settled in the scheme of the Committee. It seemed to me that we should think not only of this country, in which the word "Society" is better and more natural, but we should think of foreign

nations where academies are the rule, and that we should be a long time before we should get to be known as the Royal Society of Medicine apart from the Royal Society. But this is a minor matter. I think, however, that before we could dream of joining any general society we must lay it down as a principle that obstetrics, including both midwifery and the diseases of women and children, should in no wise be inferior to medicine and surgery. I think that by obtaining a recognition of that principle in the constitution of the new Society, that we might be not inferior in means of work, not inferior in the means of advancing obstetrics, and yet be contributing something towards the benefit of the whole estate of medicine. I think we should enter into the negotiation with a determination to uphold our own rights, to uphold our own importance. I think the great success of this Society entitles us to do this, and we may hope that we shall be able to carry the negotiation on to a happy issue. If we can do this, we shall be able to think of our present proceeding, not as destroying the Obstetrical Society of London, but as developing it into new and greater existence than it has hitherto had. If we fail in this, if we are guided by right and equity, if that which we believe right should be refused, we are in no worse position than we are at present, and we can go on in our own career, satisfied that we have done rightly and well. However great the feeling of regret may be in my own mind at the prospect of the alteration in the Obstetrical Society of London, I think it is our duty to enter upon the matter, and to carry it out fairly and honorably, in the hope that we may not only claim for ourselves our just rights, but that we may advance the status of medicine and of every individual medical man in this country. I conclude, Mr. President and Gentlemen, by reading the resolution entrusted to my care,—

> "That in the opinion of this meeting it is desirable to effect an amalgamation of the various medical societies in London if a suitable plan can be adopted."

Dr. HOLMAN, of Reigate, in seconding the resolution, said he

thought it of the greatest possible importance that they should keep in mind that in the resolution they simply confined themselves to the abstract proposition that they were favorable to amalgamation, if they could amalgamate on equal and proper terms. Nearly all Societies and all matters of business were undergoing centralisation and codification, and he thought that every Fellow must agree that no profession or business required such absolute unity as their own. He trusted that this great fusion of medical societies in London would tend very much to the improvement of the status of medicine throughout the country. The resolutions of the Royal Medical and Chirurgical Society were undoubtedly open to strong animadversion in more than one respect, but he would refrain from going into that point. Their delegates would certainly be compelled in the interests of the Society to ask for very serious alterations and omissions in the present code of resolutions. He hoped the meeting would agree to the resolution then before it, because it appeared to be a common idea that because of the great success of the Society they were therefore likely to be obstructive. He was persuaded, however, that they had one wish and one desire, and that was, to advance in every possible way the weal of their common professson which they all practised and loved.

The President here read certain letters received from Fellows unable to attend, expressing their opinions on the question before the Society.

The resolution was then put from the Chair and carried *nem. con.*

Dr. Barnes, in moving the second resolution, said,—Dr. Tyler Smith has expressed very fully indeed all the anxiety we have felt lest we should damage ourselves, and also that we should not stand in the way of the general good of the profession. By doing the one I have no doubt we shall accomplish the other. What will be of advantage to us will certainly be of advantage to the general mass of the pro-

fession. Of course one cannot help seeing that the enormous progress we have made and influence we have gained has been the result of our organization and association, and of the principles on which our Society was founded. It, therefore, must be a question of very great interest whether we shall continue to exercise the same influence, and to advance our department of medicine with the same success as hitherto, whether we shall lose or gain by the amalgamation. For my own part, I think it will depend entirely on the terms on which that amalgamation is effected. If we go into the new society, preserving strictly our own powers and our own influences, taking care there shall be no law or regulation or superior influence brought to bear upon us that will in any way mar our individual power of action, we shall be safe. The great principle we have to attend to is, that we shall go in with all the securities that we now possess for carrying out in our section what we now carry out in our Society. If we do that we shall not only carry strength to the new society, but we shall gain strength also. But if we are to be crippled by subjection to the influence of others who may not recognise fully the claim we put forward, we may be in a difficulty. The resolution I hold in my hands is one that expresses that feeling:

> "That the Society is of opinion that such amalgamation can only be effected by the recognition of the principle that obstetrics rank on terms of equality with medicine and surgery."

We must give up no part of the influences, political influence and influence on the colleges and examining bodies, which we have obtained; that is one great principle, and another is, full freedom to cultivate and to stimulate the cultivation of obstetric science, including, of course, the diseases of women and children. I hardly know that we shall be free to act with the same individuality if we are merged into another body, but we must take care that we

have at least full powers of free action to do as we are now doing.

Dr. TILT, in seconding the resolution, said that those who practised obstetrics were certainly not less anxious than any of the other members of the profession in wishing that all should be united intimately and firmly in one body, but that union could only be accepted by them on the principle of a perfect equality.

The resolution being put was carried *nem. con.*

Dr. MEADOWS then proposed the third resolution:—

> "That in order to carry out the foregoing resolutions it would, in the opinion of this Society, be desirable to form three sections in the Royal Society of Medicine, representing the three great departments of medical practice, viz. one each for Medicine, Surgery, and Obstetrics, and that the other proposed sections, relating as they do to subjects which are common to each of these, should be placed on a different footing."

He remarked that he proposed the resolution with a great deal of hesitation, because he felt that it was that of all others which would be likely to excite the greatest amount of criticism, and possibly of animadversion. Some Fellows had urged that they should not propose any resolution, but simply send their delegates, and that it was undesirable for them to show their cards till they got into the Council Chamber; but he did not think it would be fair for them to go into the Council Chamber without showing them. The one thing that he thought it was absolutely necessary to keep in mind was, that it was not so much an amalgamation of existing interests as the formation of a new society. Unless they kept that in mind the various interests of the several societies would be sure to clash. And in forming a new Society it seemed the most reasonable thing that the three great branches of Medicine and Surgery and Obstetrics should form three great sections. If that was fairly considered by the other societies, he thought it would commend itself to them. The resolution had given

rise to great deliberation in the Council because they were anxious not to wound the *esprit de corps* of the other societies, while they wished to make quite clear the terms on which alone they could amalgamate. In the scheme sent by the Royal Medical and Chirurgical Society there were seven sections—Medicine and Surgery forming one and Obstetrics forming another. In that way they were put on a par with Medicine and Surgery combined, which was certainly giving a dignity to Obstetrics, perhaps rather more than they would claim for it themselves.

Dr. BRUNTON, in seconding the resolution, observed that Medicine, Surgery, and Obstetrics would fairly include all the remaining sections. He would advise the Obstetrical Society to stand out firmly for their position and for the three great departments in the new society. He believed that most of the members of the other societies were also Fellows of either the Medical and Chirurgical or of the Obstetrical; and thought that that circumstance would diminish the opposition their plan would be likely to meet with from the others.

Dr. MEADOWS disclaimed, on the part of the Council, any intention of proposing the abolition of the other sections. They merely desired that the three chief sections should be placed on a different footing from the rest. What that footing should be it was not for their council to say.

THE PRESIDENT observed that in the resolution the word "*desirable*" had been intentionally inserted instead of "essential," since there had been some difference of opinion in the Council as to the expediency of entering so minutely into the matter at that early period.

Dr. SQUAREY, although thoroughly agreeing with the desirability of the resolution, feared it would be rather impracticable, and did not think that the Clinical Society and the Pathological Society would be willing to admit that they were inferior sections to that of medicine and surgery, or Obstetrics. He thought there would be some justice in their objection, especially with regard to the Clinical Society, because it was started especially for the encouragement of therapeutical work, in which there was more to be done, for

there was less known, than in any other department of the profession. He wished to ask whether, if the other societies objected to the formation of these three departments, the Obstetrical Society would, on that account, refuse to join the Royal Society of Medicine. He feared the formation of the three chief sections would be impossible, because the Royal Medical and Chirurgical Society, after carefully considering the subject, had been obliged to propose those numerous sections on account of the jealousies between the present existing Societies.

Dr. BARNES also thought that a difficulty was introduced into the negotiation by the resolution, since if made a necessary condition of union they might find the whole thing at an end at once and possibly be charged with obstructiveness by raising what others must consider an impracticable condition. He suggested that it might be as well for them to content themselves with the expression of the general principle in the second resolution.

Mr. SQUIRE observed that the resolution, by necessitating the formation of a new Section where none existed before, might very likely stop the discussion of the entire scheme. He thought there were many objections to the proposed resolution, and would move an amendment that it should be omitted.

This amendment was seconded by Dr. SQUAREY. In accordance with the suggestion of the President, however, it was withdrawn.

Dr. ROGERS feared if the resolution were not passed it would seem as if the Society did not intend to press it. He strongly advised them to strengthen the hands of the delegates by passing a resolution of such paramount importance. If they did not press it, it might be thought they were not in earnest about it, and Obstetrics might fall to the position which it occupied before the Obstetrical Society raised it to its present high and important place.

Dr. GERVIS begged cordially to support the resolution proposed by Dr. Meadows. He said, "If we enter the new Society, we ought to enter aiming high; aiming indeed not merely to maintain our present position, but to advance

obstetrics by the amalgamation. We certainly wish that in the new Society obstetrics should rank with medicine and surgery, but yet we do not say absolutely that unless this point is ceded, the negotiation must drop through; we simply expect our delegates to come to us in such case for further instructions, and it would then be for the Society to decide whether it would be better to amalgamate or to remain as we are. He was strongly of opinion that if we entered the new Society on the terms suggested by the resolution now under discussion, it would place Obstetrics in a higher position than it had ever yet gained.

Dr. MADGE said that the first and second resolutions they had passed reminded him of the expression that words in politics, and he supposed it was the same in medical politics, were used to conceal one's thoughts. He could not exactly discover whether there was a wish on the part of their respected Fellow Dr. Barnes to amalgamate with the other Societies or not. The third resolution confirmed his doubts, and made him think that there was really a decided antagonism to the scheme of amalgamation. (Cries of "No, no!") Before voting on the resolution, which he believed aimed a blow at the whole scheme, they should carefully consider the many advantages which would be likely to accrue to them from the proposed amalgamation, the use of the Library, &c.

Dr. HEYWOOD SMITH also thought the subject should be looked at in a broad light, as not the amalgamation of existing Societies so much as the formation of a new one, and he strongly advocated the formation of a surgical section. He thought the point too important to be left to the delegates without some expression of the opinion of the Society on the matter. He suggested that to each of the three main sections, Medicine, Surgery, and Midwifery, pathological and clinical subsections should be formed, and the other sections might be placed on a footing different from the chief three, but not so immediately dependent upon them as the clinical and pathological Sections.

Dr. TYLER SMITH denied that the Council had intended to

convey any other meaning than that obvious in the resolutions. Logically he thought Dr. Meadows quite right, and if they were forming a new Society, he thought the motion would be a good one, but though in a sense they were doing that, yet in a sense they were not doing so, for they could not forget that the Pathological Society had had a great career, a longer career than their own, and it would be ungracious for them to go to the delegates from the other societies and ask for the Pathological Society to take in any degree a lower status than the rest. He reminded Dr. Madge that by the payment of a guinea they would not have the use of the Library of the Royal Society of Medicine, but their own Library would be preserved to them.

Mr. SEDGWICK observed that if Dr. Meadows' resolution were logically correct, as Dr. Tyler Smith had said, they certainly ought to pass it, for in a series of resolutions to be instructions to the delegates, such as they were considering, they had no business to consider what was practicable, but what was logical, and right, and best. He strongly advocated the formation of the three great sections, for, as one of a series of eight, Obstetrics would be no higher than psychological medicine. It was absolutely necessary that they should uphold their position.

Dr. PLAYFAIR said that the Council had had but one object in preparing that resolution,—to secure some guarantee, before they amalgamated with the other societies, that they should not be entirely swamped. According to the scheme of the Royal Medical and Chirurgical Society, the governing Council would consist of twenty-one, three of whom would represent the Obstetrical department, and nineteen the others, so that they would be in an infinitesimal minority, and anything having to do with the advancement of their particular department would be entirely swamped. Having done so great a work in advancing the science of Obstetrics, they should not agree to an amalgamation unless they were perfectly certain that they should be on an equality in every respect.

Dr. WYNN WILLIAMS was present at the discussion at

the Royal Medical and Chirurgical Society, and the formation of separate sections of medicine and surgery was contrary to the feeling of nearly all the Fellows then present. He did not think the proposition to form three sections would be listened to. If not, he thought it would be well if Obstetrics were placed on the same footing as Medicine and Surgery, and the others were to form subsections.

Dr. MEADOWS, in reply, said he felt he had just reason for complaint, having been put forward by the Council to propose the resolution, that some of the most prominent members of the Council should have been silent when it was decided upon, and then to try and get it passed over. He still maintained that the resolution was fair and desirable, for it was only explanatory of the resolution that had gone before, and it was the only scheme the Council could devise by which to secure the equality they thought so essential. With reference to the position of the other sections, the Council has, in their resolution, omitted the use of the word "subsection" as a kind of indignity, and they thought that a point which might be left to the general committee.

Mr. SQUIRE said that there were many ways by which the equality that all desired might be secured, and his objection to the resolution was that it prescribed a particular method in which it was to be done.

Dr. HEWITT said,—At the committee meeting, which had been referred to, the resolution under consideration was not passed unanimously, but, by a majority of seven to four. The resolution was thus not agreed to unanimously, and there seemed at that meeting to be a similar diversity of opinion as to what might be the effect of that resolution upon the other Societies.

The resolution was then put—in favour of it 25, against 10. It was therefore carried.

Dr. PLAYFAIR then proposed the fourth resolution :

> "That it is essential that the President of the Royal Society of Medicine should be chosen annually, in

rotation, from the past and present Presidents of the sections of Medicine, Surgery, and Obstetrics."

He observed that it was with regard to this resolution that the Council considered it necessary to employ the word "essential." Even if they carried the point of having divisions in the Society, corresponding to the three great sections, if the President of the Royal Society of Medicine were a physician or surgeon alternately, it would be a confession on our part that we were not on terms of perfect equality with the other two sections. It had been suggested that that point might well be left to the fairness and honesty of the Council of the Royal Society of Medicine. He would be willing to do so if he considered there was much probability of such fairness being shown, but if we turned to the list of Presidents of the Royal Medical and Chirurgical Society, it is seen that during the sixty-four years that it had existed, there had been thirty-three presidents, of whom eighteen had been physicians, fourteen surgeons, and one an Obstetrician, and that was Sir Charles Locock; such men as West, and Farre, and Gooch, and many others, having been passed over. This showed that the Council of the Royal Medical and Chirurgical Society had not even yet got over the notion, which he had hoped was effete, that obstetrics was not on perfect equality with the other departments. If there was any objection made to the resolution he proposed, it would show that they were not willing to grant that perfect equality without which he hoped that no Fellow of the Society would be willing to join.

The resolution was seconded by Dr. Sedgwick, and carried *nem. con.*

Dr. Braxton Hicks proposed the fifth resolution:

"That in the opinion of this Society it is essential that the annual subscription by the Fellows of the Obstetric section shall not exceed their present annual payment of one guinea, and that there shall be no entrance fee."

He believed that the great success of their Society was due to the foresight and wisdom of its founders in fixing the subscription at a low figure. For that single guinea they had given the Obstetric Soirée, published an illustrated Catalogue of Obstetric Instruments, carried out the inquiry laid before them the other night, formed a Collection of Instruments, a good Library, and in addition to the publication of the 'Transactions' they had been able to put by £1000 as a reserve for future requirements. According to resolution 18, they would not only be required to pay an entrance fee to the Obstetric Section, but the term "Fellow" would be dropped altogether, and they would be called "Associates." Those Gentlemen who had been already Fellows would like either to be "Fellows" or "Members," certainly not "Associates." If he might give advice which had not been sought, he would recommend the new body, if it should be formed, to take a lesson from their finances and see how a moderate fee was capable of producing such good results.

Mr. DUNN seconded the resolution.

Mr. SQUIRE called attention to the confusion which existed in some of the resolutions in the use of the terms "Fellow" and "Member."

Dr. TYLER SMITH pointed out that the term "Associate" was only used in relation to the Royal Society itself, and that they would be called "Members" of the particular sections. His feeling was that it would be better to use throughout the terms "Fellow" and "Member," and not that of "Associate."

Dr. WYNN WILLIAMS, Dr. BRUNTON, and Dr. ROGERS also objected strongly to the term "Associate."

Dr. HEYWOOD SMITH suggested that the question should be left to the delegates.

Dr. MURRAY asked if it would not be enough if they were placed on an equality with the Fellows belonging to the sections of medicine and surgery.

The resolution was ultimately agreed to on the recommendation of Dr. Tyler Smith, the opinion of the Society being clearly understood by the delegates.

Mr. MITCHELL proposed as delegates from the Society Dr. Graily Hewitt (the President), Dr. Tyler Smith, and Dr. Barnes.

Dr. DAY Goss seconded Mr. Mitchell's motion, and the three gentlemen named were elected.

A vote of thanks to the President concluded the business of the evening.

JULY 7TH, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present— 44 Fellows and 6 Visitors.

The following gentlemen were elected Fellows:—Dr. Cox, Theale, near Reading; Dr. Geikel, Ontario, Canada; and Mr. Lowndes, Liverpool.

Dr. BRAXTON HICKS exhibited a new infant's feeding bottle. It had one end large, over which an india-rubber cap fitted of the form of a breast, with the nipple in the centre. The other end of the bottle was supplied with a regulating valve for the admission of air. The conditions observed by the apparatus caused it to closely resemble in warmth, form, and mode of suction, the human breast. The inventor's name was Perrett.

Dr. PROTHEROE SMITH exhibited an instrument made to subserve two distinct uses, viz., 1st. To aid the abdominal muscles in parturition; and, 2ndly. To form a fixed point, to which pessaries and other appliances might be attached for the treatment of uterine flexions and versions, and by which also a catheter might be retained in the bladder.

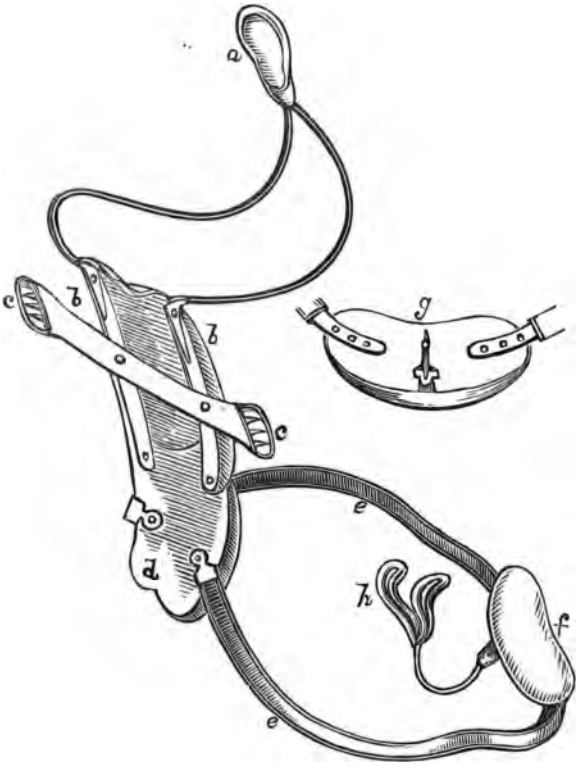
The advantages he claimed for it, when used as an aid to parturition, were—1. That a fixed point is secured for the exercise of mechanical force, by means of, as it were, an artificial pelvis, the immobility of which is secured by two pads, one sacral (*d*), the other pubic (*f*), retained in their

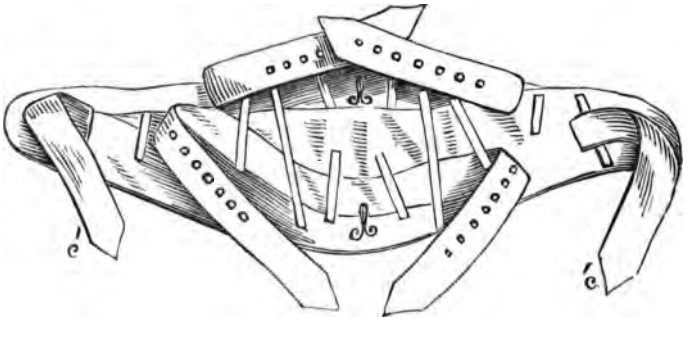
respective places by lateral springs (*e e*), which embrace the pelvis below the crista ilii.

2. Having thus gained a fixed point, attached to the sacral pad are two vertical (*b b*) and one horizontal lever (*c c*), the latter of which is a strong spring, buckled to a belt (*i i*), closely adjusted to the abdominal walls. During the parturient pains this belt is readily tightened at will by the straps (*c' c'*), to assist or supply the place of the voluntary muscular contractions, and is as easily relaxed in the intervals of pain. When required it may be used to maintain a steady uniform pressure, as is often needed after delivery. This force, reacting upon the sacral pad, affords to the patient that support in the sacral region which is so much called for during labour, and which is usually supplied by the hands of the nurse. So that when the power of the abdominal muscles has been impaired by the constraint of dress, or rendered deficient under the influence of anæsthetics, it supplies artificially a force which simulates that of the abdominal muscles when in a normal state. In this way he had found it of the greatest value in cases of antiversion of the gravid uterus at the period of parturition. Only three days ago, with the instrument exhibited, he had quickly and easily rectified this abnormal position in a patient he had attended with four children, and the ease and rapidity of the birth offered a great contrast to her former labours, and the patient expressed herself to be better than on any similar occasion.

For the mechanical treatment of uterine ailments, this instrument acts in the following way: the pubic and sacral pads fixed by the lateral connecting springs tend by their mutual reaction to alter the plane of the pelvis, if too horizontal, to one more oblique, and therefore more natural. The small sternal pad (*a*), terminating two light costal springs attached to the ends of the perpendicular springs, tends to raise the chest, to increase the lumbar pressure, and to fix the whole apparatus. From the pubic pad (*f*), and attached to it by a moveable rack-work, is a curved steel spring, bent to the shape of the vagina and made to carry at its extremity any form of pessary (*h*) or support that may be required. The advantage of a uterine

FIG. 10.





support adjusted by these means is, that its *point d'appui* being the pelvis itself, the various motions of the body cannot in any way displace it.

It had often struck him that the majority of instances of displacements of the uterus, not arising from structural disease, occur chiefly in women deficient in normal curvature of the lumbar vertebræ, in whom the sacrum stands vertically in relation to the body instead of obliquely; a defect usually attempted to be concealed by a pad or bustle. Without attempting at this time to enter upon the pathological reasons, he stated that this condition led to displacements of the pelvic organs; that with a view to rectify this a prone position had often been adopted by obstetric practitioners, and that this mode of treatment had been strongly advocated by the late Dr. Rigby. To counteract such derangements, he had after many experiments and trials at length produced an instrument by which, by creating a firm *point d'appui*, sufficient force can be gradually applied to the lumbar spine as to alter the position of the pelvis from the horizontal to the oblique plane. Thus the same advantage is obtained by it without the confinement and constrained position of the prone couch and similar appliances.

For midwifery purpose, the vaginal part being absent, the instrument is used without the costal springs and with the spinal part (*b b*), made shorter.

Dr. Heywood Smith spoke in favour of Dr. Protheroe Smith's instrument as an appliance in cases of misplacement of the uterus. He had a case of procidentia uteri under his care, that had been treated for eighteen years with various instruments, but without success. The patient now had one of these instruments, to the pubic pad of which was fixed a cup support, which held the uterus in position; and the patient expressed herself more comfortable than she had been for years.

Dr. ARTHUR EDIS exhibited a hydrocephalic fœtus, the head measuring 18½ inches in circumference. The mother, a healthy young woman, aged 19, was taken in labour with her first child on February 16th, 1868. The membranes ruptured at 4 p.m., and as the head presented, the midwife in attendance allowed the patient to continue in labour until the morning of the 18th, when Dr. Edis was called in. At this time the patient was very feverish, pulse 120, skin hot, perspiring; she had a rigor at 8 a.m., and there was a history of her having had several "fits" during her pregnancy. The fœtal heart was beating 180 in the minute. The head was perforated, when a gush of clear watery fluid ensued; the head descended and delivery was accomplished without further difficulty. The fœtal head when injected measured 18 inches in circumference.

On the 18th of February, 1869, she was taken in labour with her second child, the breech presenting. Labour progressed very slowly; after rupturing the membranes and finding little progress was made, one foot was brought down and extraction attempted in the usual way, but the head being too large to pass, perforation behind the ear was resorted to, and about three quarters of a pint of fluid escaped; the head was then extracted with little difficulty; it measured 18½ in circumference.

The mother made a good recovery.

The points of interest in this case were (1), the coincidence of hydrocephalus in two succeeding pregnancies; (2), the fact of the husband being the subject of phthisis, probably the cause of the hydrocephalus; and (3), the influence of past experience in any succeeding pregnancies in resorting to interference before rupture of the uterus (a by no means unfrequent consequence) took place.

Dr. EDIS also exhibited a four and a half months' fœtus with encephalocele, the occipital bone being bifurcated, and allowing the brain to protrude into a membranous cyst as large as the fœtal head itself.

CASE OF REDUCTION OF CHRONIC INVERSION OF THE UTERUS BY SUSTAINED PRESSURE.

By Dr. LAWSON TAIT.

(Communicated by R. BARNES, M.D.)

MARY ANN A—, æt. 31, has had two children, the second being born six months ago. On the third day after this confinement she rose to micturate, and when straining something shot out of the vulva, and a profuse discharge of blood followed. A midwife was sent for at the time, who subsequently described this substance as being like a sponge with holes in it, from which blood flowed. A medical man was sent for at the request of the midwife, and he recognised inversion of the uterus, and succeeded in reducing it. The inversion must have recurred soon after, because her history up till May 7th narrates an almost continuous loss of blood, aggravated at monthly intervals. I saw her for the first time on May 6th, when she was suffering from repeated fainting fits, and presented every appearance of approaching death from hæmorrhage. The colour of her lips was almost golden, and she looked as if the last red corpuscle had left her. She had just passed through one of her monthly floodings. I made an examination, and having detected a tumour made an appointment the next day to remove it, if the patient were in a state to undergo the operation; and in the mean time appropriate remedies were ordered. On May 7th my friend Dr. Atkinson put the patient under chloroform, and I at once confirmed a suspicion which the "feel" of the tumour had already suggested to me, that it was an inverted uterus; and the history confirmed my opinion. I made a prolonged attempt to reduce the organ without success; and although I had brought an écraseur with me to remove the tumour, Dr. Atkinson agreeing with me that such a serious operation as the amputation of the uterus would most

certainly prove fatal in the present state of the patient, I deferred interference.

On May 13th I found that the patient had so far recovered that something might be attempted; and having thought the case carefully over, I was prepared to interfere in one of two ways provided the taxis again failed. The first idea which struck me was that by passing the trocar through the inverted fundus, I might be able to incise the neck of the peritoneal flask, and thus succeed in reducing the dislocation. The second was to open the peritoneum as in ovariotomy. In the mean time, however, I had fortunately written to Dr. Barnes, asking his advice; and on May 14th I received a recommendation from him to try what sustained pressure by means of elastic bags would do if persevered in for a considerable time. I at once acted on the advice; and introducing an elastic dilator into the vagina, I injected water until the patient complained of pain, and then injected a fourth of a grain of morphia under the skin, so that the exhausting effect of pain might be avoided. On the 15th and 16th this was repeated, and during those three days the bladder was regularly emptied by the catheter, and the patient was not allowed to take the erect position. When I saw her on the morning of the 17th she said she had felt severe pain during the night and had vomited a good deal. When I removed the bag I found that the inversion of the uterus was reduced, and that the os readily admitted three fingers. The patient looked very exhausted, and had quite the appearance of having undergone a serious operation. She rallied well and partook of food and stimulants till evening, when there supervened what I had dreaded all along, symptoms of fibrinous deposit in the heart. She gradually sank, and died about forty-eight hours after the time I believe the reduction to have been effected. There were no symptoms of peritonitis, and I am quite certain that there was no laceration. I could not obtain a *post-mortem* examination. There is only one thing about the case to be regretted,—the time that the inversion existed; and for that the poor woman alone was to blame. Had I been in

possession of a good and simple transfusion apparatus (a want I wish some ingenious mechanician would supply), I should have transfused some blood into the patient before attempting anything else.

The success of the pressure in reducing the dislocation leads me to believe that no case will resist it; and that in the elastic dilator we have a most valuable aid in *all* uterine operations, and a safe and effective means of inducing premature labour.

Dr. BARNES was sure that Dr. Tyler Smith must be gratified at hearing this case. That the sustained elastic pressure was not the cause of the woman's death appeared certain. Her condition before operating seemed hopeless. Dr. Barnes, in a paper recently read before the Royal Medical and Chirurgical Society, had collected six cases treated successfully on Dr. T. Smith's plan, and since then another had been published by Dr. Schröder, of Bonn. He felt certain that very few cases would resist this treatment. When it was insufficient, then the proceeding which he himself had carried out—viz., of relaxing the constricted cervix by longitudinal incisions—would enable sustained elastic pressure to be applied successfully. In this way he felt confident that the necessity of resorting to the barbarous practice of amputating the uterus would be abolished.

Dr. PROTHEROE SMITH said that in a case in which in 1853 he had reduced an inverted uterus which had existed for thirteen months, he had, after gaining a rim of cervix by continued pressure, overcome the resistance by means of a dilator which he had exhibited to the Society on a former occasion. He thought his method a preferable one to that of Dr. Barnes in so far as that he left the organ entire; and that it had produced no evil result was evident from the fact that his patient had since given birth to two children.

Dr. BRAXTON HICKS thought that it would have been of great assistance in Dr. Tait's case if the exact cause of death had been ascertained. He thought that in these cases there may be adhesions of old standing broken down in and about the uterus which might cause interperitoneal hæmorrhage or peritonitis. From the state of depression immediately after operation in Dr. Tait's case it was quite possible something in the neighbourhood had been rent by the uterine action at the moment of restoration.

ON THE USE OF THE WHALEBONE LOOP.

By JOHN GUISE WESTMACOTT, M.D. Univ. New York, L.R.C.S. Edin.,

SENIOR MEDICAL OFFICER TO THE PADDINGTON PROVIDENT DISPENSARY, ETC.

MY attention was first directed to the use of this simple instrument on being appointed one of the medical officers to the above institution upwards of fourteen years since, during which time I have frequently, both in dispensary and private practice, had recourse to it, and have found it most serviceable; indeed, so much so, that I seldom attend a labour case without having it in my pocket, and in several instances it has equally answered the purpose of the small forceps. In bringing such a trivial-looking instrument before the notice of the Society, when the rage now seems to be for the manufacture of most formidable weapons in the shape of cephalotribes, perforators, crotchets, &c., I may be charged, perhaps, with eccentricity; but as I have not the slightest intention of endeavouring to push forward this homœopathic-looking toy to the disparagement of any of our ordinary most useful mechanical aids, but simply and fairly to state those cases in which I have found it useful, I am quite willing to abide by the decision of the Fellows. As to when the loop was first employed, or by whom invented, I know not. Smellie, in his work 120 years back, mentions a whalebone fillet similar in shape to the blade of a forceps. I can find no drawing of the instrument. From its limited application it does not appear to have been much used.

The only alteration which I lay claim to from the original loop is the substitution of a couple of screws with nuts on one side of the handle, which easily allows one end of the loop to be removed, so as to slip readily over the head of the child as it passes through the external parts, in cases where the head is large and there is danger of tearing the perinæum. In most cases, however, the loop passes out with the ex-

traction of the head without the slightest injury to the part. The loop ought to be from twenty-two to twenty-four inches long, allowing one and a half inch on each side of the handle (as is seen in the one with the ebony handle); the width of the handle one and a quarter inch, bevelled to allow the fore or second finger to hook over it, and the length from one and a half to two inches, round, as in the separate handle showing the screws, or flattened a little on each side. The whalebone is between one quarter and three eighths of an inch in breadth, about one eighth in its central thickness, and perfectly smooth on both sides, with the edges reduced a little and slightly rounded, that no abrasion may be caused by its use.

The mode of introduction is as follows:—Grasp the loop between the fore and second finger of the right hand about two inches from the top, and with the fore and second finger of the left hand guide the loop close to the head of the child, gradually expanding it, and occasionally trying to find if it catches by pulling it a little downwards, and continuing this until you are sure that in pulling the loop down you meet with some resistance, when it will have rested either above the fontanelle between the occipital and frontal bones or on the eyebrows. If pushed further it may get over the nose; this is not necessary, although it occasionally happens, but no more harm can result than a slight mark on the cheeks, which disappears in a few days; indeed, I have never seen any disfigurement result from this cause. Care, however, must be taken not to push it too far up, as it might get under the chin and strangle the child, although I have never known this to happen; besides, after feeling certain that the loop has rested firmly, there is no necessity for passing it further. The cases in which I have found the application of the loop so useful are those in which the labour is protracted and the patient nearly exhausted, and also where there is total cessation of the pains, or in ordinary labour where, from the size of the head or smallness of the parts, there is partial obstruction.

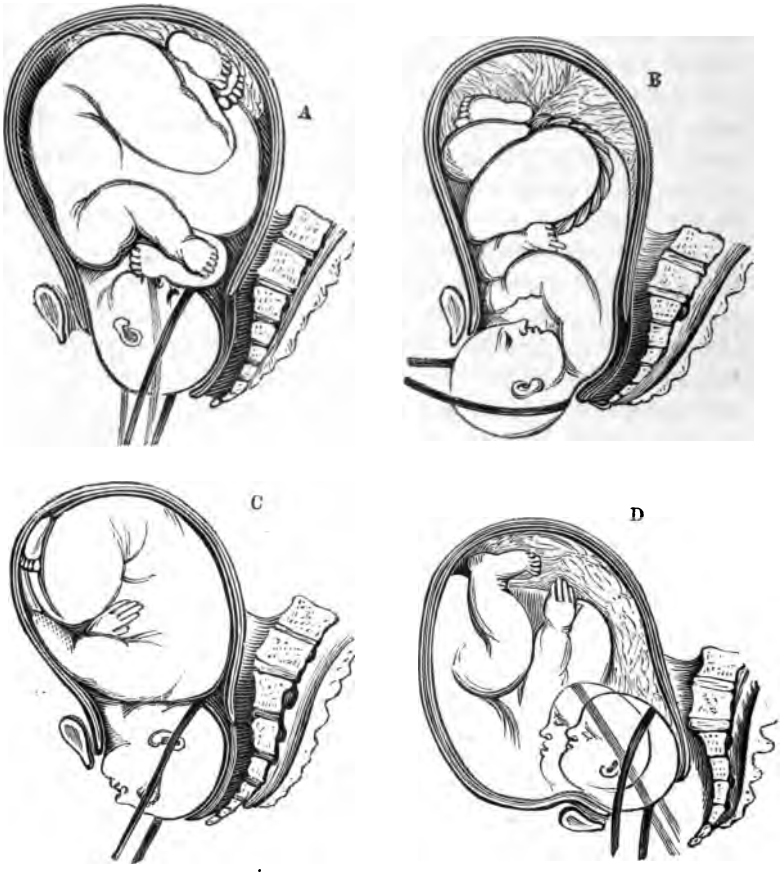
It is applied between the pains, and traction ought to be

employed when the pains are on. The motion required is simply downwards, not from side to side, as with the forceps, as the loop would only slip round and some abrasion might be caused. It is astonishing how much force in traction may be used; at the same time the perinæum ought to be guarded with the left hand while pulling down with the right. It is of little use until the os is tolerably well dilated (*liquor amnii* of course discharged). In a few instances, where the head was wedged between the promontory of the sacrum and pubis, requiring usually the use of long forceps, I have been able to work the head down as in Diagram D (p. 180), and by persevering, keeping the fingers of the left hand close to the loop while using traction, its slipping is prevented. There is never any necessity for continuing the traction while the head is passing out, but simply to let go the handle and support the perinæum. I have known some few instances where the head was so large that the loop could not pass with it without the chance of tearing the perinæum, and one end of the loop has been cut, which renders it almost useless, as seen by the shortest of the four loops, and it was to remedy this accident that I altered the handle, seen in the one with the screws, from which alteration I have certainly found benefit. Diagram A shows an ordinary case, with the different positions of the loop. Diagram B shows the occipito-posterior presentation, where the loop is often of service; and Diagram C face presentation, where the loop must be guided and pushed up until it reaches the occiput, close to the neck. Traction downwards and outwards is employed. Diagram D I have already alluded to.

Of course many cases occur in which it is necessary to employ the long forceps, cephalotribe, or perforator. After trying with the loop fifteen to twenty minutes when the pains are on, supposing they come on every two or three minutes, you ought to desist, as you would only exhaust the patient and give yourself useless trouble. These, then, are the cases in which I have experienced much benefit from the use of this simple instrument. In country practice I should consider it of very great aid, especially in those districts

where collieries and factories exist; for although one might not advocate its employment (though perfectly safe) in all ordinary labours, yet it might be admissible (and legal, if I

FIG. 11.



may use the term) where practitioners are hurried from case to case, as continually occurs in such places. Another point in its favour I consider is, that the patient is not so alarmed

as when ordinary instruments are used, and on naming that it is necessary to give some slight assistance you may exhibit and explain this formidable looking-weapon. I could mention several medical friends of mine who would bear me out in the advantages of the loop, but I should like to hear the expressions of some of the Fellows. I may also observe, with regard to the newly contrived handle shown, that one nut placed on either screw is quite sufficient to hold the end of the loop firm until it is necessary to remove it, when it can be done with great rapidity. The late Dr. Henry Bate frequently used the loop, and one of my present colleagues, Dr. H. Smith, continues to do so successfully. As Obstetric Surgeon to the Paddington Maternity, when called in by the midwives I have found it in most cases quite sufficient. The application of the loop may not come very handily at first, and the trial, if the operator be impatient, may discourage by the occasional slipping down of the instrument; but with very little perseverance that is soon overcome, and I have no hesitation in saying it repays well for the trouble.

The present loop attached to my handle has only been once applied, and that in a case of the same patient I had attended at her confinement two years previously, where there was antero-posterior contraction, but the head was of normal size. The former loop I had used thirty-two times. This loop is rather stouter than those I have before employed, but it is quite flexible, of easy introduction, and less liable to split. In the eighth volume of our 'Transactions' there is described and depicted Sheraton's Steel Fillet; but I do not consider its usefulness so extensive, and the linked joint at the top of the fillet is objectionable by causing uneven pressure, owing to its projection beyond the blades. The drawing (page 182) shows the simple construction of the loop, the dotted lines the one side lifted from the handle. The four diagrams represent the loop *in sitû*, to which I have already referred.

I must apologise to the Society for bringing before them such a slight and imperfect communication; but the fault

FIG. 12.

lies at my friend Dr. Murray's door, who asked me to write some remarks about the Whalebone Loop, the use of which he knew I had advocated some years back. I must also ask the Fellows to regard the rough diagrams as merely indicating the mode of applying the loop, not as correct anatomical illustrations, being, indeed, done in haste.

Dr. BARNES said the loop was much used by several practitioners in the east of London. He demonstrated, by reference to Dr. Westmacott's diagrams, that the true action of the loop was that of a lever. For example, when the loop was applied upon the occiput to draw this down, the forehead was fixed against the opposite side of the pelvis, forming a centre around which the occiput revolved. The whole head did not come down at once.

Dr. PROTHEROE SMITH said that he formerly had frequently used the loop, but had discarded it in consequence of the difficulty often experienced in disengaging it—a difficulty, however, which, in Dr. Westmacott's instrument, would appear to be obviated.

Dr. PLAYFAIR said the obvious risk of all sorts of fillets was that, if strong traction were made, they might seriously injure the child. One such case was recorded by Merriman, where the head had actually been separated from the body, the fillet having been passed over the chin. It was clear that when placed over the face, or under the chin, very serious results might ensue from strong traction if a good hold had been obtained, and, if it were not, the instrument would infallibly slip, and be useless. For these reasons the loop appeared to him to be much inferior in every respect to the forceps.

TEETHING.

By SELBY NORTON, M.D., Putney Hill.

IN case any gentleman present might be in a state of wonderment as to the possibility of anybody supposing he could have anything fresh to say on this very old subject, I will, without further preface, hasten to relieve his mind by

avowing that my object in this paper is to endeavour to convince you, and through you the whole profession, that there never is, nor ever has been, since the world began, any such disease, and that it ought to be expunged from our list of disorders. I shall try and show that the maladies usually attributed to teething are evidences of, and entirely due to, the universal but unphysiological practice of feeding infants on starch foods. Let us reflect first how highly improbable, nay, impossible it is, that nature, in this single instance of dentition, should have made so egregious a blunder in one of her most ordinary processes of development, as to require the annual sacrifice of a hecatomb of infants for its accomplishment. To us who have more opportunities than other men of observing, with admiration, how invariably the best means are adapted by nature to every end, it must appear peculiarly unlikely that this should be the one grand and fatal exception. Let us next consider what reasons there are for the assertion that starch is the real offender. Starch clearly is not necessary, or it would be found in the mammary secretion; but I shall go further, and demonstrate that, owing to the peculiar conditions of infancy, it is not only non-essential, but non-digestible by the infant stomach; for starch, as we all know, is naturally insoluble, and to become soluble and made fit for absorption requires to be converted into dextrin by means of the ptyalin of the saliva. But infants having no front teeth to act as flood-gates, much of this saliva dribbles out of the mouth, and having no grinding teeth the minute division of the granules, and the consequent extent of surface with which the saliva can come in contact, is lost. Again, the mode of feeding, either by spoon or suction, involves that the starch should pass into the stomach utterly unmixed with its natural solvent. The consequence is that the mass of the starch passes through the alimentary canal in an insoluble and therefore undigestible form, scraping and scratching along the delicate sensitive bowels. Surely here is quite enough to account for all the symptoms of so-called teething, and when we reflect that this process has to be gone through

by a child so fed five or six times a day for months, one begins to wonder, not that so many die, but that any survive.

The principal fatal diseases ascribed to teething are diarrhœa, convulsions, and bronchitis. Now, these never occur, at least in my experience, in a naturally fed child, that is to say one fed entirely on a healthy breast, but always in starch-fed infants. Then these diseases all occur frequently, say during the first month, when the teeth can obviously exercise no baneful influence; they occur also when the gums are perfectly cool and natural, but still they must at these times have some cause. Again, most cases, if not very severe, will soon recover without any other treatment than stopping the supply of starch; and, lastly, the diseases can be all produced by starch.

Should I be so fortunate as to have convinced you of the correctness of these views, let us examine the vastly improved position we are thereby placed in with respect to the mortality; for although it is ordained that all must cut their teeth, it is not ordained that all should be fed on starch; quite the contrary. Those deaths, therefore, which have been supposed hitherto to be owing to a cause inevitable are, in reality, due to a cause very evitable, and such deaths are, in fact, entirely avoidable. We may indulge a well-grounded expectation, then, that as these truths become generally known and acted upon the mortality from this supposed inevitable cause will gradually cease, and that thousands and thousands of infants yet unborn, whose deaths would have been attributed to that which is a mere symptom of the real and avoidable starch, will live, let us hope in many cases to be a blessing to their parents, and in some few a blessing to their kind. Take diarrhœa during dentition, for instance; every author will tell you to lance the gums and give arrowroot, barley water, rice water, or some other starchy compound; but if it be a recognised fact that the diarrhœa is evidence of nature's strenuous efforts to eject from the bowels the undigested starch they already contain, there would clearly be a better chance of saving that child by stopping the starch

altogether—the original *materies morbi*—than by "giving a sum of more to that which has too much."

It would be of little avail my thus urging you to condemn *in toto* the use of farinaceous food as a baneful infant diet unless I was prepared with an equally cheap and attainable substitute. This, I am happy to say, exists in cow's milk and warm water. This has never disappointed me; it is almost identical with breast milk, which all will admit is the very best food; and milk, be it remembered, is the only food that contains all the elements required in the nutrition of the body; but not only so, it contains them in the form most easy to be assimilated.

I feel that I have written with unbecoming confidence, but my confidence is founded upon absolute conviction—and my conviction is founded upon almost daily observation during the last ten years—of the truth of the views now so feebly expressed. I feel deeply also the great responsibility that rests on me to-night, for I know that on you now the fate of incalculable thousands trembles in the balance, whether or no it should be with them a miserable agonising death or a bright and joyous existence, and I can only regret that my unpractised hand has not the power of placing before you the truth in a more palpable and convincing light. However, I have done my best to point out on the one hand that starch feeding is theoretically wrong, and practically a huge and fatal mistake; and on the other hand I have endeavoured to purge nature from the horrible charge to which she has been so long subjected, namely, that of being the most odious of infanticides, by destroying wholesale her own offspring by teething, of which charge I confidently trust by your verdict you will find she is most decidedly not guilty.

The PRESIDENT, after remarking on the practical character of Dr. Norton's paper, said that, as the subject of the paper was closely allied with the general subject of infant mortality, the discussion on which had been adjourned from the last meeting,

it would be convenient that the discussion should now include both the present paper and the report read at the last meeting.

Dr. Thomas Ballard said he was pleased to see some one come forward to support the *heretical* doctrine "that teething was not a cause of disease of infants." Six years ago, in a review of a paper by himself on this subject, it was said "that teething is not a cause of diarrhœa, convulsions, and many other disorders of infants, is a proposition we are not inclined to accept." To attribute all the deaths and illnesses which are usually referred to teething to a natural process of growth is actually casting a reproach on the beneficence of the Almighty. It is to be hoped, now that the subject has again been mooted, that it will commend itself to the serious observation and reflection of the profession, and that one of the greatest obstacles to the successful treatment of infantile disorders may be swept away. He agreed with the author of the paper in his denunciation of teething as a cause of disease, but did not coincide with his view that starch in the food was such a potent cause of disorder. He did not think the starch *per se* was harmful. Of course, as it does not contain the elements of an animal body, it is not a substance on which an infant can be reared, but daily experience proves that its presence in the food is not deleterious. This point leads to the consideration of the general subject, "The cause and prevention of infant mortality." He thought that some practical good might result from the present inquiry and discussion, if the Society could agree upon a formula as to the best mode of feeding infants which would be simple and intelligible to everybody, avoiding such vague terms as "overfeeding," "injudicious feeding," "too early alimentation," &c. &c., each of which doubtless have a definite meaning in the minds of those using them, but do not convey to others any clear ideas as to the best course to be pursued. There seems to be no difficulty in rearing infants, so that they thrive and avoid those ailments which are usually attributed to teething, when their nurses understand that they are to have plenty of food and only two actions of the bowels in twenty-four hours. This latter can always be regulated by attention to "*the mode of giving the food*," a subject of as much importance as the nature of the food itself. If an infant sucks without obtaining the food it craves for (*fruitless sucking*), or has to suck too hard to obtain it, the bowels become disturbed and more or less of diarrhœa is the result. Should this occur while the child is at the breast, the too frequent motions indicate the necessity of some supplementary feeding; or if the infant is fed entirely from the bottle, there is probably some defect in its construction or action. The apparatus from which the child is artificially fed should be so constructed as to permit the food to be obtained when the child sucks, and not to yield any when it does not suck. The careful provision against

the child sucking air, which is made such a prominent feature of recommendation of some feeding bottles, is not of the practical importance attributed to it. It is quite possible to exclude the air and yet for the apparatus not to be well adapted for its special purpose. The kind of food best suited for infants is obvious. Of course the maternal milk is best, and, when it can be obtained in sufficient quantity, nothing more is required. Next to this is the milk of some other animal. And when circumstances require it, to this may be added with advantage some preparation of wheaten flour. More or other than this is not required while an infant has to obtain its food by sucking. The best rule for feeding an infant is, "*plenty of food, properly administered, and no drugs.*"

Dr. J. J. PHILLIPS could not agree with Dr. Ballard, as he considered it injudicious to give any farinaceous food to an infant under six or seven months old; indeed, the practice was as physiologically incorrect as it was practically found to be hurtful. The paper just read had not convinced him that no evil effects were ever caused by the process of dentition, but he entertained no doubt that the evils ascribed to teething were often caused or increased by improper feeding, and it was particularly desirable that attention should be called to the fact. Great ignorance prevailed as to the proper mode of bringing up children artificially, and infant mortality was thereby frightfully increased. This had led at the Children's Hospital to the drawing up of a formula, containing plain instructions 'How to bring up Babies,' and its distribution among the out-patients was being followed by very beneficial results. The example was deserving of imitation in a more public and systematic manner. Whether it was desirable or not, as suggested by one gentleman in the 'Report,' to teach the elements of anatomy and of physiology in schools, it was highly important that every mother should at some time be taught how to bring up her children when partly or altogether deprived of their mother's milk. This would lead to a wonderful diminution in the death-rate of children under twelve months old.

Dr. BRUNTON said that for his part he objected *in toto* to the giving of artificial food, such as Robb's Biscuits, corn-flour and the like, until the child has reached a certain age. He had had sufficient experience to teach him that the right plan was to follow nature. Of course the best nourishment was the mother's milk, and if that could not be had he always instructed the nurse to feed the child upon the next best substitute, viz. a mixture of cow's milk and water sweetened with sugar, the proportion of milk being increased as the infant grew older. He drew his lesson from nature; that the child's mouth being toothless, its office was to suck, and that the breast; but after a few

months, when the first teeth came, at about six or eight months, the infant began to bite the mother's nipple, giving her considerable pain; this pain was a lesson to the mother that she should not now suckle the infant so much, but at intervals give some artificial food, such as corn-flour with milk, sweetened; as more teeth came, less of the breast to be given, and more food of a similar kind, and so on. He adopted the same plan with infants brought up by hand, giving milk and water only until the teeth came.

Dr. ROUTH said opinions widely differed as to the feeding of infants. It was a subject to which he had given great attention; and he would shortly allude to it. I. On no point was medical opinion more divided than upon the use of *starchy* food. Once visiting a baby nursery in Coram Street, remarkable for its mortality, he found on inquiry the food given was mostly arrowroot starch. He then ventured to say it was *poison* for an infant, and gave mortal offence. And yet on no point was there more evidence than against the use of starch for infants before they had teeth. 1st. The assimilation of starch depended on its conversion into sugar by the salivary glands. And yet babies secreted no saliva for the first two or three months. 2nd. Pathological researches on infants dying after the use of starchy food proved it passed through the alimentary canal *unchanged*. 3rd. The alimentary canal of a baby was that of a *carnivorous* animal—short membranous tubular canal, and comparative short length of intestines. 4th. The very food supplied to purely herbivorous animals recently born was *animal*. *A fortiori* should it be so with omnivorous animals. *Ergo*, starchy food should not be given to infants. The moment teeth appeared, *pari passu* anatomical and physiological changes occurred in the infant's body—the stomach assumed more the character of an omnivorous animal and became bent upon itself, the intestinal canal lengthened the salivary glands secreted copiously; hence the dribbling, &c. II. An honorable Fellow had recommended *cow's milk* diluted with water as a good food for infants. But unfortunately it disagreed with many infants. It was usually watered before brought; hence a quantity of the cream was already separated. It was almost always *acid*. It was defective in *sugar of milk*. If used at all, it must be mixed with lime water, and sugar of milk should be added. III. The breast milk from the mother was the proper food for an infant; but if, as often occurred with working women, they were obliged to give artificial food, either from necessary absence at their work or from innate weakness, what food would he recommend? 1st. If cows or goats were fed in a particular way (chiefly on grass, beet-root, hay, &c.), a milk was produced which in alkalinity, saccharine excess, and quantity of casein, came very near woman's milk. This or ass's milk should be given. But (2nd) if the parents were

unable to procure these, then cow's milk from one cow, with half to one ounce of lime water and a teaspoonful of sugar of milk to every half pint of milk with one third water, was the best food. But (3rd) it should *be given early*, nay, even from *birth*, in all cases where it was clear beforehand that the mother could not nurse long. The idea that it was wrong to mix two milks was fallacious, and his experience had proved to him that the earlier it was begun the more readily the child's stomach bore it, and in nine cases out of ten a child so prepared could be weaned readily and with perfect safety. In some statistics collected from the Children's Hospital at Manchester, which he had given in his work on infant feeding, while children fed on the mother's breast milk exclusively were mostly the stronger and best developed, the next most developed and strongest were those fed on the breast milk and artificial food combined. IV. To one other point only would he refer. *The congregation of infants in nurseries.* This was a most dangerous practice. The atmosphere generated under these conditions was most baneful, probably from the quantity of ammonia generated from the urine, as well as sulphuretted hydrogen or other injurious gases from the stools. Children require air, and pure air especially. Their respiration was more rapid than adults, the consumption of oxygen great. Such congregations of infants was always a great cause of infant mortality. Malignant thrush, muguet, atrophy, besides contagious diseases, would spread like fire in such atmospheres.

The PRESIDENT commented upon the practical character of the discussion and the great importance of the subject. He expressed a hope that by the further efforts of the Committee, in conjunction with the Fellows generally, some steps might be taken to bring the subject to some permanently useful issue.

The Society then adjourned until October.

OCTOBER 6TH, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—43 Fellows and 4 visitors.

The following gentlemen were elected Fellows :—Dr. Bantock, Mr. Boyd, Dr. Caskie, Mr. Godden, Birkenhead; Dr. Hardinge, Mr. Milward, Cardiff; Dr. Oxley, Liverpool; Dr. Russell, Messingham.

Dr. BARNES exhibited the head of a child delivered by cephalotripsy, with the instrument (Hicks's) attached. The case was that of a wretchedly deformed rickety creature, aged 19, admitted in the last week of first pregnancy at St. Luke's Workhouse, in which his assistance was requested by Mr. Harris. The conjugate diameter was estimated at from 1·25″ to 1·50,″ and the space on either side of the promontory was about the same. Dr. Barnes determined to act at once instead of waiting for labour. He passed a bougie in the uterus on the afternoon of September 13th. At 3 p.m. on the 14th there was some uterine action; an appointment was made for 6 p.m. to complete the delivery. This was done with the assistance of Messrs. Harris, Rogers, aud Sison. The medium dilator was applied for ten minutes, and room enough was gained for work. After perforation the cephalotribe was applied three different times. Some pieces of the cranial vault were removed by the craniotomy forceps, and then the head was extracted by the cephalotribe. The head was so well crushed and compressed that extraction was not very difficult, there never being any considerable pressure upon the mother's parts. The whole operation lasted one hour. The mother

did well, although a miserably feeble creature. Dr. Barnes believed the pelvis in this case was the smallest in which cephalotripsy had been successfully performed in this country. The instrument worked admirably, but he thought a less curve would be better. Dr. Barnes at the same time exhibited a cast of a head grasped by the straight instrument of Dr Kidd, of Dublin, kindly lent him by Dr. Kidd.

Dr. HICKS considered this case a very satisfactory proof of the efficacy of the instrument he had modified. He wished, however, again to advert to the remarks he had made as to the advantage of using the cephalotribe as a tractor also, because, although we may compress the head down to not much over an inch at the point of pressure, if the blades are removed, the after-expansion of the bones is such that all the advantages of such compression are lost; so that an instrument with blades capable of less approximation adapted as a tractor is really more efficient.

The PRESIDENT remarked that one practical deduction to be drawn from Dr. Barnes's case was the advisability of giving the cephalotribe very little curve. It was to be recollected that, in most cases of pelvic deformity, the pelvis was not only narrow but shallow, and a nearly straight instrument would be generally applicable.

Dr. HICKS would observe, with respect to the President's suggestion, that his late instruments were not so curved as the early examples. As to the concavity looking backwards, he thought we could always arrange that the quarter turn should be so that the concavity should look forwards, because if we applied the instrument in the transverse of the pelvis, a quarter turn would bring the concavity to one or other side, so that the blades would be virtually straight as far as regards the antero-posterior aspect.

ON MECHANICAL SUPPORT DURING LABOUR.

By WM. WOODWARD, M.D., Worcester.

(Communicated by Dr. MURRAY.)

THERE is doubtless a marked difference between parturition among savage tribes and that which obtains in the higher race. In the latter, loss of muscular power, inertia of the uterus (with, of course, tendency to hæmorrhage), and

inability to endure the pain attendant on the process of parturition, are difficulties to be overcome by the accoucheur. He has to contend with the effects of so-called fashionable life (especially tight lacing), late hours and their concomitant evils, and similar causes. That these superinduce great loss of abdominal muscular power is very evident from the flabby pale appearance of the abdominal muscles so frequently met with in the dissecting-room and at post-mortem examinations. To remedy the results of such an abnormal condition we need all means that can be devised, and in my opinion it is superfluous to argue that mechanical appliances have as great scope in modern obstetric practice as in the treatment of disease generally. For the last five years I have in almost every case of labour which I have attended used some modification of the following instrument, which may be justly termed an obstetric support.

It consists briefly of a well-cushioned pad for the back (Fig. 13, *a*) the upper part of which is kept firmly against the patient by means of a belt passing round the abdomen (*b*), and so contrived as to present pressure on the abdomen, while pressure on the back is ensured by means of a small spring (*d*) upon the pad itself. The lower part of the pad is pressed against the patient's back by means of a spring somewhat like a truss (*c*), but so formed as to get its counter-pressure from the front of the pelvis. Both these attachments may be instantly run up or down the pad, and fixed where desired by the operator.

Its objects are—

1stly. To encircle the abdominal muscles, and thereby give a general feeling of support to the parturient woman.

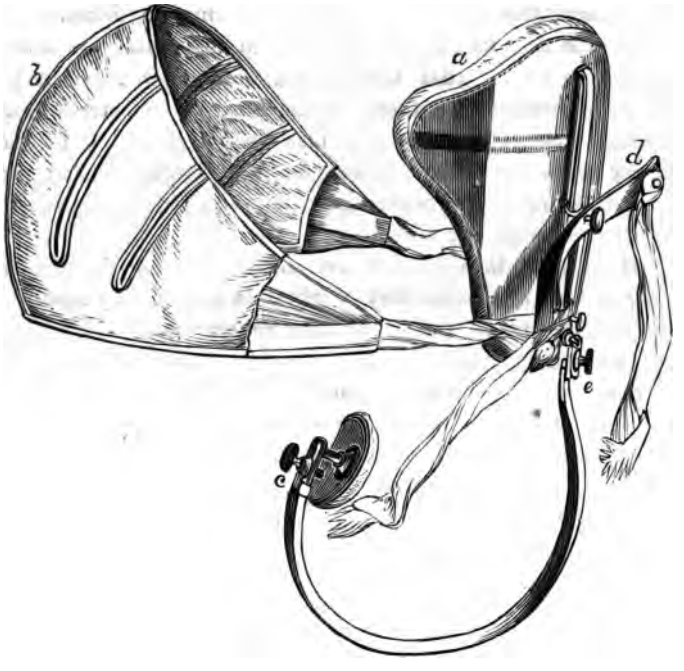
2ndly. To ensure generally the due contraction of the uterus, thus to some extent expediting delivery, and by preventing the afflux of blood into the placental vessels materially lessen the danger of flooding.

3rdly. To rectify, when necessary, a common malposition of the uterus, viz. when it is too forward and low down in the pelvis, the lower anterior portion of the body of the uterus being in front of the head of the child.

4thly. To give efficient support to the back, the more fully to achieve which object extra pressure by the hand of the nurse can be very effectually employed through its means.

If the expressions of patients are any criterion, these objects are more or less fully accomplished. Such as the following have frequently been made by them:—"It helped

FIG. 13.



me very much indeed." "It took away half the pain." "I could not have gone through my labour without it;" and many similar ones. In my notes of cases I have marked several where labour has terminated shortly after the application of the support. The instrument was exhibited at the Obstetrical Soirée in London in 1866, on which occasion it received a notice in the 'Lancet' report of that (far-famed) meeting.

It is very portable and inexpensive, fitting into a small-sized satchel, or easily carried in any obstetric bag.

The following are a few cases taken from my case-book illustrating the advantages of the "obstetric support:"

1. Attended August 15th, 1864.—"Gave immense relief," both anteriorly and in the back; applied two hours before delivery.

2. August 21st, 1864.—"Support gave very great relief; said she could not have gone through her labour without it." I have distinct recollection of the case, the patient frequently speaking of the good effects of the instrument.

3. No date.—"Used support with very great relief." "Labour over in two hours."

4. March 1st, 1865.—"Fair relief by support."

5. March, 1865.—Ditto.

6. March, 1865.—"Great relief from support."

7. April 2nd, 1865.—Support gave immense relief; in her own words, "it took away half the pain."

8. May 23rd, 1865.—"Support gave more ease than any other means."

9. May 26th, 1865.—"Great relief from support."

Some dozen cases follow at intervals, in which the words "great relief" are recorded from use of support.

10. January 30th, 1866.—Support very successful; said her back would have been in two if she had not had it on.

Similar cases to these occur up to the present time, where there has been any effect worth recording. Of course some patients object to its use (though I have only recollections of a very few so doing), such as those who cannot even bear their back supported with the hand, but that does not detract from its great advantage in the majority of cases.

I can most conscientiously state that since adopting this appliance I have scarcely had a single case of severe flooding.

Dr. BARNES observed that there was nothing new in the principle of support and compression of the uterus during labour. The apparatus exhibited was but another of many ways of giving

such support. In his lecture on 'Obstetric Support,' he (Dr. Barnes) had quoted Kristeller, who described a method of actually squeezing the child out of the uterus by external pressure. The Dublin School, represented by Dr. Joseph Clarke, Collins, and Beatty, had long practised the application of a binder during the expulsion of the child, and the manœuvre of pursuing the uterus in its retreat towards the pelvis by the hands during the expulsion of the child, and of keeping up the pressure upon the uterus afterwards to ensure full contraction, the detachment of the placenta, and the prevention of hæmorrhage. This practice he had himself always carried out. He was not a little surprised to observe that within the last few years this method had been promulgated in Germany as a discovery by Credé, and a manœuvre which had been in use here for at least a century was actually distinguished by Dr. Credé's name.

Dr. PROTHEROE SMITH observed that, his name having been mentioned in connection with the paper just read, he wished to say that he was most desirous to give to Dr. Woodward full credit for his very ingenious and useful devise, which was well described in the Catalogue of the Obstetrical Instruments of the Society, as a belt which encircles the abdomen, and which, being attached to two springs on a padded plate, effects an amount of pressure on the back similar to that usually supplied by the nurse's hands. Whilst recognising fully the merits of his original design, and admitting that both instruments press on the back, he entirely disagreed with Dr. Woodward in the idea that the principle of his "Obstetrical Back Supporter" had anything in common with the instrument he (Dr. Smith) exhibited at this Society on the 7th of July. Though Dr. Woodward, in addition to his primary intention, now claimed for his instrument the principles Dr. Protheroe Smith had previously advocated for his, and which he had enlarged upon in his paper read in August at the annual meeting of the British Medical Association at Leeds, he must be allowed to say that simple compression by a circular bandage, with a lumbar pad like the Obstetrical Back Supporter, would be insufficient to accomplish the objects now proposed—that of rectifying the antiverted gravid uterus, and supplying sufficient support and compression during labour. He was led to say so after a lengthened trial of a bandage for upwards of thirty years, which any one would remember who had attended his clinical lectures on midwifery at St. Bartholomew's Hospital, and which he hoped, still believing it to be a cheap and useful help in midwifery, to exhibit to the Society. But on the subject of compression of the abdomen and uterus, with a view to expedite labour, Dr. Barnes had just made some very pertinent remarks, and he fully agreed with him that there was nothing new in it.

He would, indeed, say it was as old as woman, since nature had furnished her with an apparatus for the purpose, which, though all-sufficient in savage life, was impaired in the civilised woman through the evils resulting from her dress. He regarded both parturition and defecation as functions accompanied by two distinct expulsive forces—one voluntary, and produced by the spinal and abdominal muscles; the other involuntary, and effected by either uterus or intestines, as the case may be. It followed that if the one was deficient, the work was left disproportionately, if not, in some instances, altogether, to the unaided efforts of the other. Hence, as regards parturition, when the voluntary muscular apparatus of the abdomen and spine was impaired by the continued pressure of clothes suspended around the waist from infancy, the structure of the muscles become so deteriorated as to lose much of its power of contraction, often shown in the dead-house by the attenuated parietes of abdomen in instances of tight lacing. When this defect exists, or when power is suspended by the undue employment of anæsthetics, the uterus is overtaxed, and painful, lingering, or perilous labours may result. To obviate this evil, after many experiments, extending over six years, he had produced an instrument which, to be brief, he would describe as an artificial skeleton, so constructed as to present in its pubic, sacral, lumbar, costal, and sternal pads and springs, all the different *points d'appui* from which a properly adjusted bandage is made to simulate the action of the lumbo-abdominal muscles. Thus, by a light but immovable instrument the accoucheur had the power of using the utmost force which may be required to aid the uterus in the act of expulsion, as well as of rectifying it when antiverted in consequence of the laxity of the abdominal walls. In this way the duration and risks of childbirth can be greatly diminished, and the accoucheur relieved to a great extent of the tedious attendance to which he is otherwise so often obliged to submit in the lying-in room.

CASE OF LABOUR COMPLICATED WITH OVARIAN DISEASE.

By R. T. WARN, M.R.C.S. Eng.

(Communicated by Dr. MURRAY.)

MRS. D—, aged thirty-two, of rather a delicate constitution. Been married five years; had two children, her labours were lingering. The second child was born in August, 1866; placenta adherent after each delivery.

She first noticed a swelling about two years ago on the right side, which was then rather smaller than a hen's egg, although she had complained of pain on that side for some time before. The swelling very slowly but gradually increased.

In September, 1868, she consulted me, and said she thought she was pregnant, and considered she had been so three months. She complained of great nausea and sickness, tenderness and swelling of the mammæ, and enlargement of abdomen, but catamenia had been regular, though rather deficient in quantity.

I would just state that in her previous pregnancies the catamenia had been regular, though scanty.

I did not see or hear anything of her until the night of the 31st December, when her husband came for me in a great hurry, desiring me to come to his wife. On my arrival I found her suffering from pains similar to those in the first stage of labour, cramp in legs and sickness. On making an examination per vaginam the uterus was very high up, and the os not the least dilated; she complained especially of pain on right side, and directed my attention to a swelling there. It was about half the size of a man's fist and very hard. I gave her opiates, effervescing salines, and ordered turpentine stupes, which greatly relieved her, and in a few days she was so much better as to be able to get up and attend to her usual domestic work. From this time (*i. e.*

31st December) the catamenia ceased altogether. This had never been the case before.

April 19th I was again sent for to see her, and found her symptoms precisely the same as when I visited her on the 31st December; the swelling on the right side was larger, hard, and very tender and painful; the abdomen was large, and there was much sickness.

The 26th April Dr. Graily Hewitt saw and examined her; he distinctly diagnosed a fœtus in utero, but with regard to the swelling there was much doubt. After eight or ten days from Dr. Graily Hewitt's visit she rallied and got about again.

About the end of June I saw her again; the swelling on the right side had increased, and the abdomen was very large. She had not felt any movement of a child, but complained of a dead weight.

September 30th labour set in; the pains were uterine, but of very little power; this was about 1 o'clock a.m. At 10.30 a.m. Dr. Murray saw her, and after examining her decided, as the best plan, to dilate the os with Barnes's dilator, to turn, and deliver. This was carefully and successfully done under chloroform, occupying about one hour. The child was rather small, was born alive, but lived only six hours.

I saw Mrs. D— in the evening; she said she felt more comfortable and in less pain. There had been a little sickness during the day. This I attributed to the chloroform. Her pulse was about 100, rather feeble. Ordered brandy, beef-tea, ice, &c.

The next morning when I saw her she complained of pain and sickness; she had not slept much during the night, but had felt more comfortable in herself up to 9 o'clock, when the nurse said she had a fit of shivering, and from that time to about 3.30 a.m. (2nd October), which would be about thirty-two hours after delivery, the sickness increased, the breathing became hurried, pulse about 120, very feeble, and at about 3.30 a.m., October 2nd, she died.

On the 3rd I made a post-mortem examination, and on

very carefully opening the abdomen found it full of a thick oily-looking fluid of a chocolate colour. After taking away as much of the fluid as possible, I came down upon the cyst and discovered a hole about the size of a shilling, where it evidently had burst; the cyst was very thin at that part. I consider it as most likely that the cyst burst during the paroxysm of vomiting, and just about the time when the shivering took place.

The quantity of fluid was about three gallons.

The left ovary was perfectly healthy, so also was the uterus.

The cyst was non-adherent.

Dr. MURRAY remarked that on seeing the case he found the patient somewhat exhausted with few and slight labour-pains, and the liquor amnii not discharged. The abdomen was large, but not tense, fluctuation was distinct, and the fœtal heart could but faintly be heard. After consultation and a careful consideration of the two or three different modes of treatment that might be adopted, he preferred that of turning under chloroform to any other. He ruptured the membranes as the hand was introduced into the uterus, and without much difficulty brought down a foot. After delivery the abdomen retained the round and prominent appearance it had before. This Dr. Murray thinks was fair evidence that the cyst had not ruptured during the process of delivery, otherwise the abdomen would have been more flat, and percussion clear from the floating intestines. If Dr. Murray had seen the case earlier, he would have induced labour before the full time, as, indeed, he had done some years before in a case, with perfect success.

Dr. ROUTH said the case just referred to was useful as calling attention to the best practical treatment in ovarian cases accompanied with pregnancy. He (Dr. Routh) had seen two cases of this kind, in both of which two common facts were noted:—1st. Both the children were premature, and not viable. 2nd. The ovarian growth was rapidly excited by the concurrent pregnancy. If this were invariably the case (which, however, could only be proved by statistics of several cases), clearly the treatment indicated would be to bring on premature labour or abortion, and so relieve the patient at once from the double lesion and the risk of the ovarian tumour giving way, and perhaps proving fatal. If, on the contrary, there was any hope of the production of viable children (and this especially in cases where, for purposes of

property, a child was desirable), then it would be wiser to tap the patient, and so, by giving more room for the uterus to develop, favour the growth of the child in utero, and subsequently make labour and delivery more easy. For it could not be denied that the coexistence of an ovarian tumour at delivery made labour very tedious, and probably might make it necessary to use the forceps or the crotchet.

Dr. BRAXTON HICKS thought that before we accepted the rule of Dr. Routh's as our established guide in these cases, it would be highly desirable to ascertain the per-centage of cases in which serious trouble arose. As far as his own experience went, he had never seen any serious trouble occur. He could at once call to mind six pregnancies which had done well, with healthy children, and he thought he had seen more than this. In one of the cases he had tapped at the seventh month, the patient going on to full term, the baby being born healthy.

Dr. BARNES had seen many cases of ovarian disease complicated with pregnancy. Although, for reasons which he would state, he thought it was generally right to bring on premature labour, he admitted that there might be occasions on which tapping the cyst or doing nothing would be the better course. It might be stated as a general truth that nature could not tolerate the double burthen of a growing uterus and a growing ovarian tumour; the rapidly increasing pressure must at some time cause such distress that relief must in some way be obtained; in most of the cases he had seen, this relief was found in the advent of spontaneous premature labour. He thought we should accept this indication as a guide in practice. Whilst pregnancy went on there was no security against some formidable catastrophe. We could not tell what the condition of the tumour might be, or what accidents might at any time arise. In one case he had seen death follow from rupture of the cyst; it had burst under the increasing pressure when the pregnancy had reached the seventh month. In another case, which had been seen by many medical men, the patient, when approaching seven months' gestation, became greatly distressed; he proposed inducing labour, but was overruled; the patient at last had severe peritonitis and shock, and died. It was found that the tumour had been rolled over on its axis by the uterus rising below it; the vessels of the tumour were strangled; blood had burst into the cyst and into the abdomen. Last year he saw another case in which the patient died under symptoms of peritonitis and collapse. The post-mortem revealed the same thing; the tumour had been rolled over twisting the pedicle and strangling the vessels. Rokitansky had related similar cases. To obviate these accidents, which might occur at any time, and against which there was no security, he believed it was best to reduce the case at once to its simplest ex-

pression by eliminating the pregnancy, which could always be done and easily, leaving the ovarian tumour to be dealt with according to uncomplicated indications. He should advise not to hurry the emptying of the uterus, but simply to place a bougie in the uterus to provoke labour, leaving the labour to be completed with as little interference as possible.

Dr. GERVIS suggested whether in these cases, when it was certain that rupture of the cyst had occurred, it would not give the patient, at all events, some slight chance in her favour if gastrotomy were performed, the ruptured cyst removed, the pedicle secured, and the peritoneal cavity cleansed.

Dr. WILTSHIRE remarked that no mention had as yet been made of the operation of ovariotomy in these cases. It appeared to him that, besides the induction of premature labour, at least two other courses were open—either to perform ovariotomy in the earlier months of pregnancy (as had recently been done by Mr. Wells with perfect success), or, if unhappily the patient were at full term and the tumour large, ovariotomy and even Cæsarian section might in very serious cases be resorted to. In the few cases where it is possible to diagnose a unilocular tumour, tapping might advantageously be performed. Dr. Wiltshire then referred to the dangers likely to follow delivery, owing to the tumour, no longer supported by the gravid uterus, falling about in the abdominal cavity, and thus giving rise to rupture and peritonitis; and he mentioned a case which was seen by the President with him in which this accident occurred.

Dr. ROGERS thought that no uniform rule of practice could be laid down, for even rupture of the cyst during pregnancy was not necessarily fatal. Dr. Rogers had been consulted in five cases of pregnancy complicated with ovarian disease. One was tapped before delivery; mother and child lived. Another went to full period without operation; mother and child did well. In two, premature labour was brought on; the mothers did well, the children died. In the fifth, which was a case of triplets, labour was induced at the fifth month; the children, of course, were not viable; the mother is living, having been tapped since. He wished to add that too high praise could not be given to Mr. Wells for his resolution in operating in the case of ruptured cyst referred to by Dr. Wiltshire.

Dr. HALL DAVIS mentioned a case of pregnancy and delivery complicated by ovarian tumour in a lady under thirty, who had, in expectation of difficulty in her labour, been recently under his care. In May, 1866, ten months after marriage, she was found by Mr. Spencer Wells to be the subject of a tumour, of the size of two fists, of left ovary, reaching upwards to a level with umbilicus. In February followiug she was supposed to have suffered an early miscarriage. In September, 1868, having ceased to men-

struate, she exhibited signs of early pregnancy in October. On the 24th of March, when Dr. Davis first saw her, obscure pulsations of the fœtal heart and fœtal movements were detected. At this time the ovarian tumour had become displaced to above the umbilicus by the enlarging uterus; it was little if at all larger. The patient was scarcely more uneasy than a person with uncomplicated pregnancy, therefore no indication so far appeared for interference, and she went out daily. Dr. Davis was summoned to her labour, at full term, in the latter part of July. The case was very tedious, the tumour interfering with the proper action of the abdominal muscles in the second stage of labour, and the bladder requiring the catheter. At length, after the vagina and outlet had been properly softened and dilated by Barnes' bags, Dr. Davis applied his long forceps, and extracted a full-sized living child; the placenta followed shortly after. The next day the ovarian tumour was found occupying the left iliac region as before her pregnancy. The patient returned to Ireland in five weeks later in fair health, performing the duty of suckling her child most satisfactorily, and so long probably the tumour will not enlarge. In this case, at all events, interference before labour was contra-indicated, but in other instances, accompanied by distressing symptoms, one form or other of treatment suited to the particular case would, of course, be indicated.

The PRESIDENT stated that he had seen the case referred to at a former period, when it was a question as to the presence of pregnancy. The tumour was then of comparatively small size. With reference to the general question of the proper treatment of cases of this kind, he inferred from what had been said that the feeling of the Society would be in favour of inducing premature labour whenever the size of the ovarian tumour was such as to render it likely that the labour would be interfered with to a serious degree by its presence at full term. The cases related by the various speakers were of the greatest practical interest.

A CASE OF RUPTURED UTERUS, OCCURRING UNDER CIRCUMSTANCES OF EXTREME SUDDEN ALARM, IN ABOUT THE SEVENTH MONTH OF PREGNANCY. DEATH FROM PERITONITIS IN EIGHT DAYS AND TWELVE HOURS FROM THE PERIOD OF OCCURRENCE.

By J. T. MITCHELL, F.R.C.S.

SUCH a case as the following I have never seen recorded, nor of such have I ever heard.

The subject, Mrs. C—, 42 years of age, and a delicate person, had been attended by me in six previous deliveries, and two miscarriages at early periods. The first delivery was in February, 1855, when my notes remark "a small pelvis, a large head, violent uterine effort; mother and child did well." I attended her again in 1857, 1859, and 1862. The note appended to each occasion was "natural." In January, 1865, I attended her again, when, for the first time, great obstruction at the brim prevented the descent of the head, and after having given proper time to the natural uterine efforts without success, I delivered her easily with the forceps of a living child, which did well, and she had a good recovery. On the 3rd February, 1868, she was again in labour at the natural full period of gestation, when I found that she had for some time been suffering from mollities ossium, and that the pelvis had suffered considerable diminution of capacity both at the brim and also at the outlet, so that I could only deliver her with the forceps, after a protracted effort of the most energetic description, when a dead child was born, but she had a speedy and good recovery; soon after which, I made a minute examination as to the condition of the bony structure of the pelvis, when I found that it had undergone a considerable change of form, under the influence of the softening process, which I believed had been proceeding for the last few years, and was still existing. I now urgently advised her

that should she again become pregnant, to give me early intelligence of her condition. Accordingly on the 22nd March, 1869, she called on me and stated that she was nearly five months advanced in pregnancy, upon which I made a careful examination as to the existing capacity of the bony passages, when I found that the contractions had universally increased, that the ascending rami of the ischia and pubes had considerably more nearly approached each other, and, therefore, the outlet of the pelvis had become greatly contracted, and that the antero-posterior diameter had also become much reduced since her former delivery, especially that the promontory of the sacrum had become much more projecting into the bony circle. I then told her that it was necessary that she should submit to the artificial induction of labour, at the period of seven months and a fortnight from the time when she had last menstruated, namely, the 22nd October, to which she consented. Accordingly I fixed on the 29th May for performing that operation. She continued to go on from this time to the 19th May quite well, on which day a most terrific storm of thunder and lightning fell upon the immediate vicinity of her house, which, discharging its fiery element on the elevated stack of chimneys of a house near her residence, threw down the brickwork of the chimneys, and passed through the house, doing much damage. On this occasion she was sitting close to the window of her bedroom, when the most extensively luminous and sudden flash of lightning occurred, followed instantly by the most terrific crash of thunder, and which made her believe that her house had been blown up; this frightfully alarmed her, and she instantly felt a sudden agonising pain within the pelvic region and towards the left groin, upon which she fainted, and on recovery she felt a permanent, continued, dull heavy pain in the region in which she first felt the sudden spasmodic agony; this continued until the next day, when at 8 a.m. I was summoned to attend her. Upon my arrival I found her sitting up in a chair, in which position she had kept herself all night, "as she could not lie down in bed." I then had her gently lifted on the

bed, ordered the whole abdomen to be freely and frequently fomented, and put her under the influence of opium. This soon relieved her to a very great extent, as I witnessed on two subsequent visits paid up to 9 p.m. At 1 in the morning of the 21st I was again sent for to her, when she had evidently been suffering from contractile pains of the uterus, followed by considerable hæmorrhage. On examination per vaginam I found the os uteri open to the extent of the size of a small tea-cup, with a small portion of placenta presenting, over which I easily passed my hand, it being very small and the os uteri very relaxed. I very soon found my hand in the uterus, but the points of my fingers had now evidently passed into a rent in the organ, about three inches above the os. Thus discovering what had happened, I immediately sent for my friend Mr. Arthur, of Kennington Green, upon whose arrival I requested that he would at once examine and diagnose the case, when he declared that he had never found such a condition in any case that he had ever met with in his large experience in an extensive parochial practice of many years' duration, and that he believed the uterus to be ruptured. Agreeing in this matter, we decided on the propriety of at once delivering, in the execution of which, there was not the least difficulty, for a foot could be felt about three or four inches above the portion of placenta projecting at the os. This was easily grasped, and by it the delivery was effected within ten minutes, when a very small dead female fœtus was born, apparently of not more than six months and a fortnight's or even less gestation. As the knee of the child lay in juxtaposition with the rent in the uterus, it is most probable that the uterus had become torn by the violent contraction of the organ upon this projecting portion of the fœtus on the day when it suffered the violent spasm.

The placenta was expelled by the uterine efforts, assisted by the gentlest traction on the cord and slight pressure on the abdomen, through which the uterus was felt naturally contracting. No hæmorrhage followed the delivery of the child or placenta. The abdomen was gently secured by a thin broad bandage after delivery, which had been placed round

the waist before she was delivered. Vomiting had come on immediately that labour-pains had set in, which continued uncontrolled almost up to the time of her death. After delivery, she suffered comparatively very little abdominal pain, but the abdomen began to swell within five or six hours after delivery, and in about twenty-four hours it had become greatly distended, which condition still continued to increase until she died on the 28th.

I regretted that a post-mortem examination could not be obtained, for had it been granted I am of opinion that it would have been discovered that it was not from the mere contracted condition of the osseous brim of the pelvis that this accident had happened, but from a degenerated condition of the organ itself in its walls, produced by the same general cachectic state of constitution which had been existing for some years, and had led up to the affection from which the bony system had for some time been suffering, and had been the cause of the deformity.

Dr. Hall Davis stated that, in his experience of cases happening independently of external violence, in the great majority the labours were of short duration in women who had had several children, and in whom degeneration of the muscular fibres of the uterus had taken place before the organ had fulfilled its function. But he recollected one case where a woman, in good health apparently, who had not been worn by repeated pregnancies, but whose pelvis was deformed by rickets, had sustained a rupture of the uterus during the action of the ergot of rye exhibited by an ignorant midwife. In this case examination of the muscular fibre adjoining the laceration discovered no degeneration of fibre.

Dr. Henry Charles Andrews referred to a case of mollities ossium which he had met with in private practice, but which was not followed by rupture of the uterus. The patient had given birth to several children, and was in labour at the full period. The pelvis was so contracted that two fingers could scarcely be introduced, and delivery per vaginam was impossible. After consultations, it was found necessary to resort to the Cæsarian section. The patient did well for two days, but vomiting and peritonitis then ensued, followed by death on the third day. A post-mortem examination was made, and the degeneration of bone and other structures was so marked that it was impossible to make a preparation and preserve the deformed pelvis. The pelvic bones were brittle, carious, and distorted, and the articula-

tion, loose, so as to admit of the ischium and pubes being moved upon each other.

A CASE OF TRIPLETS AT UPWARDS OF EIGHT MONTHS OF PREGNANCY.

By William Martyn, M.D., F.R.C.S.

Mrs. D—, aged twenty-six, a delicate woman, had borne five children previous to this confinement. Some of these had suffered severely from syphilis derived from their parents. She married at sixteen years of age.

On April 29th last, at half past 2 o'clock a.m., I was summoned to this woman, who was then in active labour. Her pains had set in about half an hour; they were not active, not as usual in her case, she said. The abdomen was large and broad, the os was dilating freely, membranes were protruding over the head of a child, but flaccid. I ruptured them at once and applied a binder firmly over the belly. Soon the advancing child came into the world, small in size but vigorous. The belly remained large; the breech of a second child was felt per vaginam, in its own membranes. These I ruptured and tightened up the binder. The second child was soon born with slight assistance, pushing before it a large mass of placenta, attached to which were two cords, one belonging to the first-born, the second coming from within the uterus, and not belonging to the second child.

It was now evident that there was a third child. I gave a dose of ergot, once more tightened up the binder, and very soon came down the third child, head presenting, membranes unbroken until I ruptured them. This child was nearly moribund, but in a little time it rallied.

The three children had each their separate membranes, were about the same size, as large nearly as a small seven months' child. The first and last were males, and were attached to a joint placenta. The third had its own placenta. The mother did well. All the children died within twenty-four hours.

NOVEMBER 3RD, 1869.

Dr. GRAILY HEWITT, President, in the Chair.

Present—55 Fellows and 11 visitors.

The following gentlemen were declared admitted:—Joseph Godden, M.R.C.S., Birkenhead; James Milward, M.R.C.S., Cardiff.

The following gentlemen were elected Fellows of the Society:—William Gill, L.R.C.P. Lond. M.R.C.S.; George Rice Ord, M.R.C.S., Streatham Hill; John Taylor, M.R.C.S., Earl's Colne, Halstead.

The following gentlemen were proposed for election:—William Cox, M.R.C.S.; B. Duke, M.R.C.S.; Henry Hemsted, M.R.C.S.; Pembroke Minns, M.D.; and Alfred Walker, M.B.

Dr. EDWARD JONES, of Sydenham, exhibited an Anencephalous Fœtus with *Spina bifida*, and gave the following history of the case.

On October 2nd Mrs. C— called upon me, to engage me to attend her in her first confinement, which she said she expected would occur in about five or six weeks. She was a well made, strong-looking young woman of about twenty-five years of age; she said she did not feel very well, without complaining, however, of anything very definite. In the evening of the same day I was summoned to her in a hurry,

and on examining, found a foot protruding, tightly grasped by the os tincæ; this slowly dilated, and the delivery went on satisfactorily, until after the hips were in the world, when I was somewhat startled by a sudden spurt of bloody water, which proved to have proceeded from the sac of a spina bifida, which had burst. The child was dead and anencephalous, the eyes very staring, and the whole face very congested. There appeared to be scarcely any neck, the head being rigidly fixed on the spine, and the sac of the spina bifida projected but a very little way below the occiput, looking like a piece of raw meat, and was not covered by integument, which terminated abruptly at the edges of the bifurcated spine, presenting the appearance of a recently healed incised wound. I believe it is unusual for the sac of the spina bifida to arise so high up from the spine, and still more so for it to be uncovered by the ordinary skin. The mother was one of seventeen children, of whom thirteen are still living, and several of them have large families, one, eleven children; they are generally healthy, and not one in any way deformed. During her pregnancy, the mother is not aware of having had any accident, or shock, nor of having seen anything frightful. She has had uninterrupted good health, and has always been well fed. Her husband had been away from her for some weeks, and had only returned two days before I saw her. On the night of his return connection took place *several times*. She was greatly exhausted and felt some peculiar sensation in the womb, which she thinks was coincident with the death of the child, as she never felt it move afterwards, though she had constantly done so up to that time.

CASE OF EXTRA-UTERINE TUBAL FŒTATION, WITH SPECIMEN.

By J. Lucas Worship, Esq.,
MEDICAL OFFICER TO THE SEVENOAKS UNION.

E. J. W—, aged twenty-nine. On February 17th, 1869, I attended this woman in her first labour, she having been married between three and four years. She had never been pregnant before.

She had been in labour for some six hours previous to my having been sent for; her labour progressed slowly but naturally from 5 o'clock a.m., till 11 o'clock a.m., when uterine action completely left her, the os was fully dilated, and as she was of a very weakly and delicate constitution, I determined to deliver her.

I applied the long forceps without much trouble, but was unable to bring down the head at all; under these circumstances, I put her thoroughly under chloroform, and delivered her with very considerable difficulty by turning the child, which was still-born.

She was a long time recovering from the effects of chloroform, and there was a good deal of hæmorrhage; but otherwise she made an uninterrupted good recovery.

On October 6th I was called to see her. Since her confinement she had become immensely fat. She is now suffering from constant feeling of sickness and pain in the lower part of the abdomen, with a sensation of very great distension, accompanied with a great deal of pain over the region of the liver and under the right shoulder blade. She last menstruated from August 18th to 25th more freely than usual; the discharge returned in considerable quantity a week after, and lasted three days, free from any clots, since which time she has never been free from a pinkish thick secretion. On examining the uterus I found the os exquisitely tender to the touch, and the vagina very hot.

She had a frequent desire to pass water which was high coloured but free from any deposit.

I considered her suffering from congestion of the uterus, and having attended her ten years before with pelvic abscess, which at times discharged itself per rectum, and at others per vaginam, I feared the old trouble might be again threatening her.

I gave her medicine to relieve her portal system, which obtained for her great relief. Afterwards I gave her sulphate of iron in combination with sulphate of magnesia, and procured for her an elastic abdominal belt, from all of which she expressed herself as feeling much more comfortable.

On the 27th I saw her; she was sitting up and said she was better than she had been for some months past, but soon after I left her she experienced some return of the pain in the abdomen with nausea; she was put to bed and hot fomentation applied.

I was sent for on the following morning, and now found her constantly retching, vomiting great quantities of greenish matter; she was very pallid, her pulse very feeble and quick.

She complained of great pain in the lower part of the abdomen; also very severe pain in her right side, and shoulder blade, and clavicle; her feeling of distension was very great, and she felt that if she could pass a quantity of flatus she should soon be free from pain.

I gave her frequent small doses of morphia, sulphuric ether, and brandy, and soda water.

In the evening she was somewhat relieved, but still very uneasy, lying on her left side, and feeling comfort from the constant application of hot fomentations.

On the 29th I was hastily summoned to her at 8 a.m. She had passed a very bad night, constant sickness, and pain all over the abdomen and in the shoulder blade, her bowels had acted, and she had passed water every time she vomited.

She was evidently sinking, and I thought there might be a rupture of an abscess in her pelvis, though the pain was

more to the right side and the former abscess had been in the left. This suspicion was concurred in by my partner, Dr. Lovegrove, who saw her with me in the course of the day. She died at 10 o'clock p.m.

On the 31st I made a post-mortem examination of the body with my partners, Dr. Lovegrove and Mr. Pearless.

The body was immensely fat.

On opening the abdomen we found it full of blood and much distended, the pelvis especially being full of clots of very dark colour.

On examining closely for the source of the hæmorrhage, we found the specimen herewith shown on the right side of the uterus; no adhesions had taken place; the cyst had ruptured, but the membranes were intact. A fœtus can be plainly seen through the membranes.

The uterus was rather larger than in the natural state, and on opening it we found it lined with a deciduous membrane.

The rest of her organs, with the exception of being very pale and fat, were free from any disease; nor could we trace the seat of the former abscess. There was a gall stone in the gall bladder.

On inquiry I find that till the last week she had been passing small clots of blood per vaginam, about the size of a small bean.

The case is one of extra-uterine tubal fœtation.

FOUR CASES OF CONGENITAL IMPERFORATE VAGINA, AND ONE CASE OF CONGENITAL PHYMOSIS, OCCURRING IN THE SAME FAMILY.

By Henry M. Madge, M.D.

There is not much to be said about these cases calling for remark, except the coincidence of all occurring in the

same family. The family consisted of five children, the eldest a girl about ten years old. The latter, it seems, went into the country on a visit to a maiden aunt; this elderly lady, impelled by some strange kind of curiosity, made the discovery that her niece "was not as she should be." She was sent back to town, and I found the vagina completely occluded by a dense membrane. By this time the mother, who never previously suspected anything wrong with the children, had found that all the girls, whose respective ages were eight, six, and four years, were affected in the same way. On examination, I found that the "occluding membranes" in the two younger children were less dense than in the elder, and in the youngest the upper part of the membrane broke down under the director.

They were all operated on in the usual manner and did well.

My attention was now directed to the youngest child, a boy about two years old, who was the subject of well marked congenital phymosis. After waiting for a time, and trying one or two other measures, I performed the operation for circumcision. One of the means I tried in this case was that of gradual dilatation. When the parts are in a healthy condition, I do not see why the orifice of the prepuce should not be as capable of being gradually dilated as the urethra, the os uteri, and the parts concerned in natural labour. The time required, however, and the repeated frights caused to a child of two or three years of age, by the employment of the necessary means, would render it unsuitable. In the case of passive and willing, that is, very young or much older patients, gradual dilatation might possibly be made to do away with the necessity of a cutting operation for phymosis.

A NEW PRINCIPLE OF TREATMENT IN PROLAPSUS AND PROCIDENTIA UTERI.

By J. H. Aveling, M.D.

It would perhaps be as well, before entering upon the subject proper of this paper, to give a short sketch of the case which suggested the principle of treatment to be presently proposed.

Eliza W—, a poor woman, aged thirty-seven, married, has three children. The youngest is seven years old. She was confined with this child on a Saturday, and on Monday she got up and did her usual household work. On Tuesday she found something protruding like a marble, which went away when she laid down. It continued to increase in size for the next seven years. For the last fourteen months of this time she had not been able to return it as usual at bed time.

On examining the patient the uterus was found completely extruded, and its cervix ulcerated. She was sent to bed, the uterus replaced, and treatment ordered for the ulceration. A fortnight after this the following operation was performed.

The patient was laid on a table on her back, and her legs held well up out of the way. The uterus was then withdrawn and the inverted anterior wall of the vagina brought well into view. From this a heart-shaped piece of mucous membrane was removed, its base being next the cervix uteri. The extreme length of the portion removed was two inches and a half, and its breadth two inches. Six iron wire sutures were then passed with the darning stitch, the two ends of each being twisted temporarily together. The uterus was then returned and the sutures secured, out of sight, by passing a coil and perforated shot over them in the manner described in a paper by the author on "Vaginal Lithotomy" read before this Society in 1863. In ten days the sutures were removed, and in a fortnight the wound was completely healed.

The patient never had an unpleasant symptom, and complained of no pain. She gradually began to walk about, and was delighted to find the uterus did not come down.

This operation was done in March, 1866. In August of the same year, after violent exertion and fright, caused by a child's clothes catching fire, she suffered from retention of urine, and this, upon examination, was found to be caused by the uterus being very much retroverted. It was replaced and the difficulty ceased at once.

In November the patient was again examined. She had walked six miles without the uterus coming down. The vaginal cicatrix was firm, and supported the cervix uteri well up in front. The relaxed ligaments, however, allowed the fundus of the uterus to fall backwards, and the angle of retroversion, as determined by my utero-pelvimeter, was fifty degrees.

The patient has been seen frequently since, and the uterus remains in the same position.

I do not trouble the Society with the foregoing case, to show that procidentia, unreduced for fourteen months, can be radically cured, but to point out the position of the uterus after the operation, and to state my belief that the success of the operation was caused by the retroversion which it produced. It is evident that an elongated and wedge-shaped body may be easily pressed into and through an elastic tube, if that body be in a line with the tube. But let that same body be placed across the mouth of the tube, and the difficulty of inserting it will at once be seen. The uterus, in a line with the vagina by its own weight and the superincumbent pressure will, if the ligaments be sufficiently relaxed, soon find its way down; but if it be retroverted, violent exertion only produces further retroversion, as has just now been shown.

Having accidentally arrived at this fact, I venture to suggest a principle of treatment in prolapsus and procidentia deduced from it, and which, as far as my reading goes, has not yet been published, namely, the cure of one form of displacement of the uterus by the artificial production of

another. We all know that retroversion may exist in a patient with no ill effect, and without causing any unpleasant symptoms; we, therefore, surely are justified in substituting a lesser for a greater evil.

In the temporary treatment of prolapsus I believe the most successful pessaries are those which press upwards the anterior vaginal pouch, which has the effect of producing retroversion. For this purpose I use a pessary, which is simply a piece of stiff wire, with a loop at one end to receive the ends of a band round the waist, and a knob at the other which rests in front of the cervix. Great comfort is ensured the patient by using a leaden tape to determine the depth of the vagina, and the thickness and form of the pubis, and then having the pessary made by it exactly to fit the parts. I do not, however, wish to dictate how the principle shall be carried out. Those who like utero-vaginal pessaries may have the uterine stem made to form an angle with the vaginal portion; and doubtless many other methods of applying it will suggest themselves. Nor do I wish to insist that the artificial displacement shall be made posteriorly. It is simply my desire to submit to the Fellows what I believe to be a most important element of success in the treatment of a most troublesome class of complaints, and to beg that they will test its worth rigidly, and expose it mercilessly should it prove to be false.

Dr. Rogers observed that genuine cases of procidentia, as distinct from elongement, were of frequent occurrence. At times, from various causes, instruments could not be worn, therefore it is incumbent to give relief, and if possible, effect a radical cure. In some instances perineal operations were very successful, and the uterus, by the loss of blood during this operation, became greatly reduced in bulk, as stated by his colleague Dr. Routh. In other cases the mode of procedure recommended by Drs. Marion Sims and Emmett is most effective. Dr. Rogers had himself successfully operated in several cases after their manner, and on examination he did not find the uterus retroflexed or even retroverted, a condition which Dr. Aveling desires to produce; nor would he like to perform this operation if it were invariably to be attended by such a result. In one or two

cases that he examined after the lapse of two years, the uterus was found in its normal position.

Dr. ROUTH said—It was a question with him whether Dr. Aveling's case, interesting as it was, was really a case of *procidentia* uteri. True procidentia was a very *rare* disease. He understood by this term a disease of the uterus prolapsing externally, without longitudinal hypertrophy. The so-called cases were cases, so well described by Huguier, of *allongement*. He, Dr. Routh, since his attention had been called to make the diagnosis (and his experience was not small), had only seen *three* cases of true procidentia. Huguier, in sixty-four cases of so-called procidentia, examined through a course of fifteen years, had met only with *two* true cases. The length in Dr. Aveling's case, as measured from fundus to end of cervix, was not stated. In cases of *allongement* it measured from three and a half to four and five inches, and even more. Now the method of cure adopted by Huguier was not popular yet in England. Sometimes, it was true, the cervix was removed by the écraseur, but as in these cases there was generally cystocele as well as rectocele present, there was always danger of wounding, by the écraseur, bladder or rectum. He, Dr. Routh, had almost invariably practised in these cases the *perineal operation*. He believed this succeeded mainly owing to the loss of blood sustained, which caused the *uterine hypertrophe to diminish*, helped by the long rest enforced on the patient by the operation. He believed the loss of blood also had a good deal to do in the cure after Huguier's operation. But although he for one, like many other members of the Society, were wont to listen to with great pleasure, and to profit much generally by Dr. Aveling's papers, and interesting as this case was, he did not quite make out its theory. First, the bleeding, which he, Dr. Routh, believed so essential an element in the cure, was very *small* as compared to that in the perineal or Huguier's operation; and, second, if the cure was only effected by inducing retroflexion, and the uterus was in any way lengthened, *i. e.* if the case was a marked one of *allongement*, the pressure on the sacrum would be necessarily greater, and must give rise to troubles usually observed in retroflexion in the end to a greater degree, and defæcation be seriously interfered with.

Dr. BARNES observed that although Huguier's description of apparent procidentia as real hypertrophic elongation of the uterus was undoubtedly correct in the great majority of instances, still he not unfrequently saw cases in which the whole uterus could be felt outside the vulva inclosed in the everted vagina. In these cases the uterus was generally retroflexed.

The PRESIDENT was disposed to think that the retroversion must have existed before the operation was performed. The

displacement in question itself was, as he had found in his own experience, a most troublesome affliction for the patient.

In answer to Dr. Routh, Dr. AVELING did not propose this operation in cases of prolapsus caused by elongation of the cervix.

In answer to Dr. Rogers, Dr. EMMETT had also noticed retroversion to be produced by the operation described in the paper.

ON THE TREATMENT OF HÆMORRHAGE AFTER LABOUR.

By ROBERT BARNES, M.D.

OBSTETRIC PHYSICIAN AND LECTURER ON OBSTETRICS TO ST. THOMAS'S HOSPITAL, AND EXAMINER IN MIDWIFERY TO THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

No subject can well have more claims upon the anxious interest of the obstetric practitioner than hæmorrhage after labour. Directly and indirectly it is the source of a large proportion of the deaths and other calamities of childbed. Not seldom immediately fatal, it never fails, if the patient is so fortunate as to escape with life, to leave in its wake a long series of troubles. I believe it has not yet formally engaged the attention of our Society; and I think this fact may show how wide is the range of medical study that falls within our province, that now, after ten years of active work, after 100 meetings, all of them devoted to topics of interest, we should still have to discuss for the first time a subject of such paramount importance as uterine hæmorrhage.

It is not my ambition to present a full description of the subject in all its relations. I propose to limit myself more especially to the examination of the practical value of the means of dealing with flooding which are in common use; to the elucidation of the conditions upon which the arrest of flooding depends; and to the deduction of definite principles of action.

Hitherto there has been one sole dominant idea as to the condition for stopping hæmorrhage. This is to obtain contraction of the uterus. And, in perfect harmony with this, there is but one order of remedies relied upon. If these fail to answer their sole design of ensuring contraction, they fail altogether; the resources of the physician are exhausted; and the unhappy patient must either perish or trust to the uncertain resources of nature.

To bear out this proposition it is only necessary to refer to any and every text-book on obstetrics, and to the universal practice of the profession.

Hæmorrhage after the removal of the placenta may arise from *two sources*:—The first is from the gaping vessels on the placental site; the second is from lesion of the cervix or other part of the uterine structure. In the case of severe rupture of the uterus, this latter source is obvious enough. But minor lacerations of the cervix, especially after forcible delivery, although far more common, are seldom recognised. The danger is increased by the paralysis of the cervix which, for a time, almost constantly succeeds severe labour and injury. As I shall not recur to this subject, it may be well to take the opportunity of saying that when we find oozing or trickling of bright blood going on after labour, notwithstanding that the body of the uterus seems well-contracted, we may suspect laceration of the cervix to be the cause. I have no doubt that such injury is the true explanation of those exceptional cases of hæmorrhage which Gooch described as due to an over-excited circulation driving blood through the contracted uterus.

The simple means of stopping hæmorrhage from a rent cervix is to swab the part with perchloride of iron.

I will now consider the *means which Nature employs to arrest uterine hæmorrhage.*

1.—The first and the most efficient is active contraction of the muscular coat of the uterus. This constricts with the force of a ligature, the mouths of the arteries and veins on the placental site. So long as this firm contraction holds, no

blood can escape. To obtain this firm contraction is the great end of the obstetric practitioner.

Active contraction settles into what may be called tonic contraction, by which the volume of the uterus is permanently diminished. When this is effected the patient is secure against a return of hæmorrhage.

2.—The uterine arteries have a certain retractile property. Shrinking inwards, their mouths become narrowed, and the formation of thrombi is favoured.

3.—The veins or sinuses of the uterus running obliquely or in strata in the uterine wall, are most favorably disposed for closure by the approximation of their walls, and the valve-like arrangement where the sinuses pass from one stratum to another. Even moderate tonic contraction of the uterus will so close the uterine sinuses as to stop hæmorrhage, provided the circulation is not unduly excited.

4.—If the stream of blood through the uterine vessels be stopped for a short time, and diverted into the systemic circulation, so that there is temporary rest in the uterus, the opportunity is given for the formation of clots in the vessels. Under great losses of blood, the property of coagulating does not seem to be impaired. Stasis, for a brief period, is enough to allow of clotting. No doubt it is owing to this property that many women are rescued to all appearance from imminent death, after the most profuse and uncontrollable floodings. Under syncope, or a state approaching to it, the heart beats so feebly that the circulation is almost suspended. There is suspension of circulation in the uterus, and if ever so slight tonic contraction of the uterus goes on, the vessels get plugged by coagula. The probability of this event should encourage us never to despair of a case of hæmorrhage.

I will not dwell upon the symptoms or diagnosis of uterine hæmorrhage. These must be too familiar to us all. The symptoms, as indicative of particular modes of treatment, will be described incidentally. I will, therefore, proceed to discuss the mode of action and value of the remedies in common use.

We have, *first*, a class of remedies whose power is limited by one imperative condition. These *remedies act by exciting contraction of the uterus*. To effect this, there must exist a certain degree of nerve-force, able to respond to centric or peripheral irritation. All the remedies commonly relied upon presuppose this condition. Ergot, compression of the uterus, cold, all depend upon their power of inducing uterine contraction. If the nervous exhaustion be so great that irritability is lost, these agents are useless or injurious. At this point then the art of the physician fails, unless he call to his aid a new power which will act under the given conditions of nervous exhaustion.

Secondly, when to evoke contractility is impossible, we may still stop bleeding by the direct application of styptics to the bleeding surface. In these agents lies the new power that is sought.

We will now study the action of the first class of remedies, *seriatim*. But I must first invite attention to one or two subsidiary points. Hæmorrhage from atony is often "internal" and, to some extent, "concealed." Internal hæmorrhage is promoted by any cause that obstructs the escape of the blood externally. Thus, obliquity, or bagging of the uterus, very likely to occur when the patient lies on one side, or inclining to the prone position, with the pelvis raised, will form a depending sac in which blood will readily accumulate. An allied condition is retroflexion of the uterus. This, also, is not very uncommon after labour with inertia. It was noticed by Burns. I have seen it several times, the hæmorrhage ceasing when the fundus was lifted into its proper position. Retroflexion is even more common as a cause of secondary hæmorrhage. The best way of restoring the uterus in these cases of primary hæmorrhage, is to pass a hand into the cavity, and by it to lift the fundus forwards.

1. One or two general rules should be observed. Place the patient on her back. The value of this rule is very great. Gravitation helps to let the uterus sink into the pelvis, instead of bagging over, as when the patient is on her side; the face is open to observation, to access of air, to the ad-

ministration of stimulants and food; the chest-walls can expand for better respiration; the uterus and aorta are under more easy control by the hand of the physician.

2. Pass the catheter. A full bladder diverts the nervous force from the uterus, inducing irregular contractions, and it impedes manipulation through the abdominal walls.

If the uterus is enlarged, that is, rising as high as the umbilicus, the first thing to do is to pass the hand into the cavity to clear out the contents. Although this proceeding is deprecated by many, and looked upon by most as hazardous, whenever there is hæmorrhage with an enlarged uterus, I think there is no rule in obstetrics more imperative than to pass in the hand. If the patient is lying on her back we can support the uterus externally whilst we introduce the other, without admitting much air into the cavity; we gain certain knowledge as to what is in the uterus; if there is nothing the hand will act as a stimulus to contraction; if there are placental remains or clots, we have the opportunity of removing at once one of the most certain causes of flooding, primary and secondary, and of averting a very frequent cause of puerperal disease. In many cases this operation is followed by immediate success, little else being needed.

Often have I when called in to a bad case of puerperal fever wished that I could be fully assured there was nothing in the uterus. I perfectly agree with Collins and others, who insist upon the importance of this proceeding. I do not hesitate to repeat it two or three times if the uterus fills again; and in this latter case the hand is ready to carry up the uterine tube for the injection of perchloride of iron.

Ergot is frequently the first remedy tried. It acts by causing contraction of the uterus. But how often does it fail to arrest uterine hæmorrhage! The caution I would urge in respect to ergot is this—if the first dose be not quickly followed by contraction it is probably because the nervous power is too much exhausted to respond to the excitation. If, therefore, the first dose be not quickly followed by contraction do not trust it any further. If it is unable to do good it is likely to do harm. I am sure I have seen the

administration of ergot, when the system was much prostrated by loss of blood, cause further depression. In states of great depression no absorption goes on in the stomach. Ergot, brandy, beef-tea, all alike load the stomach until rejected by vomiting.

Cold is very much relied upon. How does it act? Producing a kind of shock, it excites reflex action, inducing contraction of the uterine muscle. The essential condition, therefore, of its action is that there be sufficient nervous power to respond to the excitation. If this power be deficient then the shock of cold only adds to the general depression; no contraction follows, or it is only momentary. Nor does the harm cease here. The continuous application of ice and cold water will often cause congestion of the internal organs, and even lead to pleurisy, broncho-pneumonia, or peritonitis. I have seen cases of these forms of puerperal fever which, I have no doubt, were due to the patients being deluged in water, and being left for an hour or more chilled in wet clothes, because extreme prostration made it dangerous to change. Velpeau bears testimony to the same effect. The rule, then, in the use of cold should be not to trust to it if it be not quickly successful in evoking uterine contraction. The best form of using it, if the hæmorrhage is slight, if the nervous energy is good, is to apply the cold hand, or a lump of ice, or a plate taken out of ice-water, to the abdomen or back of the neck. Taking a draught of cold water into the stomach will sometimes excite uterine action. The douche-method practised by Gooch and extolled by Collins, of pouring a stream of cold water from a height on to the abdomen, is the most certain to evoke contraction, if any contractility remain. It is open to the objection that it swamps the bed and exposes the patient to the danger of subsequent chill and inflammation. A better way, and scarcely less effective, is the flapping the abdomen with the corner of a wet towel. Cold is even more effectual if applied internally. Levret was, I believe, the first who used ice in this way. Perfect says Levret "hit upon a very odd and ingenious expedient; he introduced a piece of ice into

the uterus, which being struck with a sudden chill, immediately contracted and put a stop to the hæmorrhage." Of late years it has been a frequent practice to inject cold water into the uterus. I know it is often effectual. It has the advantage of washing out clots as well as of exciting contraction. But I am not sure that it is free from danger. Levret's plan of placing a lump of ice in the uterus is the safest and best mode of applying cold. But I must repeat the warning that, unless there exist in the patient the power of reaction, cold will do harm instead of good.

Kneading the uterus, or compressing it firmly with the hand, is a means of exciting the uterus to contract, much trusted to and often useful. Even gentle friction or compression will often cause the uterus to contract and expel the placenta. A similar force applied when the uterus remains flaccid, or contracting spasmodically, will commonly induce firm equable contraction. In states of greater exhaustion, with profuse flooding, even firm grasping is apt to fail. Whilst the strong hand is powerfully compressing the uterus and aorta, the hæmorrhage is certainly checked. But who can long keep up the requisite grasp? As soon as the tired hand relaxes, the hæmorrhage returns. Another hand takes the place of the first, and is in its turn exhausted, and so on, until the condition of the operator is almost as pitiable as that of the patient; this manœuvre is, however, upon the whole, the most trustworthy. If the hæmorrhage can be restrained for a few minutes the strength will rally and contraction may return. On the other hand, when there is deficient power, the uterus relaxes again and again; each renewal of flooding makes it more difficult to excite permanent contraction. Clots form again in the cavity, excite spasmodic action, and compel the repeated introduction of the hand to remove them. Alternate relaxation and contraction of the uterus acts thus:—Expanding, it sucks up more blood from the aorta and vena cava; contracting, this will escape again on the uterine surface; and so the uterus goes on, relaxing and contracting, drawing
the system, and discharging it into the

the uterus acts like a Higginson's syringe, pumping blood out of the body.

Not only, then, is kneading uncertain, most painful to the patient, and exhausting to the physician, but it entails a special danger. This severe handling of the uterus, attended by bruising of the tissues, is liable to cause metritis. I have seen cases of metritic puerperal fever which could be assigned to no other cause.

A form of pressure sometimes preferable to outward grasping of the uterus is one suggested by Dr. G. Hamilton. The fingers of the right hand are passed *under* the uterus, which the relaxed state of the parts usually allows; then, with the other hand upon the uterus externally, the organ is firmly compressed between the two hands. The cavity is closed by the anterior and posterior surfaces being flattened together. This manœuvre involves less violence, and is for the time as effectual as external kneading.

The compression of the abdominal aorta deserves attention. By it you may arrest the flooding long enough to gain a respite and time for the preparation of other means. It is practised in two ways: Ploucquet, who was the first to insist upon the method, compressed the aorta by the hand in the uterus. Baudeloque and Ulsamer compressed it through the flaccid abdominal walls. This is the plan most generally followed; it is recommended by Chailly, Caseaux, Jacquemier and others. Kiwisch objects to it that compression on the aorta simply compels the blood to go round by the spermatic arteries, and that compression of the vena cava being unavoidable, the blood gets to the uterus by the numerous anastomoses of the pelvic circulation. The good resulting, he says, is due to the necessary compression of the uterus. I have occasionally derived advantage from it, and look upon it as a momentary resource.

Plugging has been practised in various ways. Paul of Ægina placed a sponge soaked in vinegar in the uterus. In later times Leroux was a warm advocate for this method. Rouget (1810) advised the introduction of a sheep's or pig's bladder into the uterus and then distending. Diday (1850)

used a vulcanised caoutchouc bladder in this way. If there is nervous force enough to respond to the irritation provoked by the presence of these foreign bodies, the plan may be useful. But as excitants to contraction they are inferior to other means, and as plugs I am sure they cannot be trusted.

Now let us assume that the means which act by inducing uterine contraction have failed. The hæmorrhage goes on: must we abandon the patient to a too probable death? Is there no other condition for stopping the stream of blood from the open vessels? There are styptics powerful enough: why should we not use them? If these will act precisely when other means fail, is it not unreasonable to reject their aid?

The most convenient of these styptics is, I believe, the perchloride of iron. As I am mainly responsible for its introduction into obstetric practice, at least in this country, it may be desirable that I should give a more connected account of the matter than has hitherto been done.

The styptic virtue of the perchloride and other salts of iron has long been known. These salts have been applied to bleeding surfaces by swabs by many surgeons. The idea of applying styptics to the bleeding uterus is also not new. But until recent times there has prevailed an unreasonable dread of touching the inner surface of the uterus with any styptic.

Perfect says he stuffed the vagina with tow and oxycrate with success (oxycrate is vinegar and water). Hoffmann tells us he succeeded in stopping a profuse hæmorrhage by passing pledgets of lint dipped in a solution of "colcothar of vitriol" as high into the vagina as possible. This is a mixture of sulphate and oxide of iron.

I am not aware of who first of late years ventured to apply a strong solution of a salt of iron to the interior of the uterus immediately after labour. I myself was led to try it by learning that a strong solution of perchloride of iron had been injected into an aneurismal sac with the view of coagulating the blood in it. I inferred that if the effect of contact with fluid blood in such a position was instantly to cause a clot

that would stop the passage of the styptic into the circulation, it would not be less safe if applied to the blood at the mouths of uterine vessels. The perchloride of iron has also been used to inject into nævi and into varicose veins. Here, perhaps, it acts partly as a caustic, as well as by causing coagulation. It should not be forgotten that some disastrous accidents have followed this application. To these I will refer presently.

It appears from Hohl that the injection of perchloride of iron was used by d'Outrepont. Reference to the subject in those of his works which I have consulted has escaped me. It is strongly praised by Kiwisch,* who used a solution of two drachms of the muriate of iron in eight ounces of water. Long before becoming acquainted with the experience of d'Outrepont and Kiwisch, I had been in the habit of using the remedy. In the Lettsomian Lectures on "placenta prævia," delivered by me in 1857,† I recommended this practice. In a lecture on "The Obstetric Bag," published in the 'Lancet' in 1862, I again recommended that perchloride of iron should be carried for the purpose of arresting hæmorrhage.

I again pointedly referred to the subject in the following remarks made on the 1st February, 1865, in the Obstetrical Society, and published in the medical journals soon afterwards. The subject under discussion was puerperal fever. As a means of preventing the loss of blood, as hæmorrhage undoubtedly predisposed to puerperal fever, I have found nothing of equal efficacy to the injection of a solution of perchloride of iron into the uterus after clearing out the cavity of placental remains and clots. I have used this plan for several years, and in a large number of cases after labour and abortion, and have always had reason to congratulate myself upon the result. The perchloride of iron has the further advantage of being antiseptic. It instantly coagulates the blood in the mouths of the uterine vessels. As

* 'Beiträge zur Geburtskunde,' 1846.

† See 'Lancet,' 1857; and 'The Pathology and Treatment of Placenta Prævia,' 1858.

many of the cases referred to had been treated in consultation, of course my practice had already been under the observation of many of my professional brethren. Since then I have continued the practice, and further experience has only confirmed me in my conviction that in it we possess the most certain means yet known of controlling flooding in states of extreme inertia.

Dr. W. Read in 'Philadelphia Library of Medicine,' 1861, quotes von Schreier, of Hamburg, as having stopped hæmorrhage after abortion, by a swab steeped in a weak solution of perchloride of iron. Dr. Alfred Hegar in a memoir on the treatment of placental remains in 1862 says he had used it in various forms.

Dr. Noeggerath in 1862 had used it in metrorrhagia. Scanzoni in his systematic work on 'Obstetrics' Ed., 1867, recommends it to be carried in the obstetric case. Still it does not appear to be in general use on the continent.

In April of this year (1869) Mr. Norris of South Petherton published a paper in the 'British Medical Journal,' which had been read before the West Somerset Branch of the British Medical Association in 1865, relating four cases in which he had injected the solution to arrest post-partum hæmorhage. He has since narrated other cases. At the British Medical Association meeting held at Leeds in August last, Dr. Braxton Hicks related a series of cases in which he had successfully followed this method.

The following are the conditions under which the perchloride of iron is indicated; the mode of using it; and the clinical history of the cases in which I have used it.

The clearest indication arises in those cases of post-partum hæmorrhage in which the loss has been rapid and profuse, and the ordinary means of inducing contraction of the uterus fail. The perchloride of iron, therefore, comes into use exactly in the most desperate cases, where other means break down.

It should not be delayed too long whilst we are trying kneading, cold, ergot, &c. If these means do not answer quickly, it is because collapse has gone so far that the

ordinary excitants of muscular contractility are ineffectual. If we go on long trusting to these excitants, the patient may sink into further collapse and perish. The styptic should, therefore, be applied if possible before the stage of utter collapse. For although, even in this stage, the further loss of blood may be prevented, yet the patient may sink from the effect of the loss previously sustained.

The use of the styptic is especially indicated in twin-labours if hæmorrhage follows. In ordinary single labour, the area of the placenta, and therefore of the placental site when the uterus is uncontracted, I find to be about sixty square inches. The whole of this large superficies may pour out blood. Now, in twin-labour, this superficies may be nearly double. It may in fact extend over nearly the entire surface of the uterus. In addition to this enormous bleeding area, the previous distension of the uterine walls will have diminished their power of contracting.

An important preliminary step is to clear the uterus of placental remains and clots, so that the fluid when injected may come into immediate contact with the walls of the cavity. At one time it was my practice to wash out the uterus with iced water first. I now prefer not to lose time in doing this. Besides, at the period when the perchloride is indicated, the exhaustion is generally so great that the injection of iced water is ill borne. I am inclined to believe that at this stage the injection of cold water is more hazardous than the perchloride of iron.

The mode of using the perchloride.

The most convenient formula is to take ʒiv of the liquor ferri perchloridi fortior (Br. Ph.) and mix in a deep vessel ʒxij of cold water, or the ordinary liquor ferri perchloridi (Br. Ph.) may be used undiluted.

The injecting apparatus is a Higginson's syringe, having a uterine tube eight inches long. Cold water is first pumped through so as to exclude air. Everything being ready, the

hand is pressed into the uterine cavity to clear out placental débris and clots. The uterine tube is then passed into the cavity guided by the hand in the vagina, quite to the fundus. The syringe is then compressed gently so as to allow the solution to trickle over the surface of the cavity in a slow and equable stream. It is especially desirable to avoid all force in injecting.

The hæmostatic effect of the iron is produced in three ways:—1st, there is its direct action in coagulating the blood in the mouths of the vessels; 2ndly, it acts as a powerful astringent on the inner membrane of the uterus, strongly corrugating the surface, and thus constringing the mouths of the vessels; 3rdly, it often provokes some amount of contractile action of the muscular wall.

It is rare to find any renewal of hæmorrhage after the injection has been made as described. If there should be any return, it may be repeated.

Reasoning from general knowledge, it may be apprehended that the injection of perchloride of iron into the uterus is not free from danger. The only clear cases of death attributable to the injection of the perchloride of iron have been where it was used for the treatment of nævi.

Mr. R. B. Carter refers ('Med. Times and Gaz.,' 1864) to a case where immediate death followed the injection of perchloride of iron into a nævus on the nose of an infant eleven weeks old. The quantity injected was ɱv. Another case is recorded by Mr. N. Crisp, of Swallowfield. Post-mortem examination showed that the point of the syringe had penetrated the transverse facial vein, and that the blood in the right cavities of the heart had been immediately coagulated. Dr. Aveling, now of Rochester, mentioned to me another case. These cases suggest that there is some special danger attending the injection of perchloride of iron into nævi. It would be exceedingly interesting to know the exact *modus operandi* in these fatal cases. It will be observed that an injecting force is used; that in one case the point of the syringe actually penetrated a vein; and that the blood in the venous cavities of the heart was coagulated. Did the per-

chloride of iron reach the heart, and then cause coagulation? This is doubtful. The process more probably was as follows: The moment the perchloride touched the blood in the facial vein at the seat of puncture, it created a small clot or thrombus. This thrombus was carried to the heart, and there served as the nucleus for further coagulation.

These unfortunate cases suggest the doubt whether a similar catastrophe may not attend the intra-uterine use of the remedy. May not some of the fluid penetrate into the circulation and cause thrombi in the blood-vessels or heart? This risk is met by the property the iron possesses of instantly coagulating the blood it comes in contact with at the mouths of the vessels. The thrombi there formed protect the circulation beyond. Thrombi, indeed, always, or nearly so, form in the mouths of the uterine vessels under ordinary circumstances. The artificially-produced thrombi break down in a few days, and under the contraction and involution of the uterus get extruded into the cavity. For some days the débris from these thrombi, small coagula formed by free blood, and some serous oozing, come away. The discharge is black; it is apt to stain linen; and the nurse should be warned of this, lest she should take alarm at the unusual appearance. The discharge sometimes becomes a little offensive. This may be corrected by washing the vagina with Condy's fluid. But the perchloride is a valuable antiseptic; and I believe this property is useful as a preservative against the septicæmia to which women who have gone through a labour with hæmorrhage are so prone.

There is still another question. May not air be carried into the uterine sinuses, and thence into the heart? Possibly. The only case known to me in which symptoms causing a suspicion of this accident arose was a case of abortion, in which an injection was made by means of a clumsy india-rubber bottle. Symptoms like those described as following on air entering the circulation, and death ensued. We cannot, then, regard the application of perchloride of iron to the uterus without some misgiving. But there are reassuring considerations. The small rigid uterus, with an imperfectly

dilated os, as in abortion, is very different from the large flaccid uterus with widely expanded os after labour. In abortion I always, if possible, use the swab.

But granting that there is reason for apprehension that the perchloride *may* do mischief, it must not be forgotten that the continued loss of blood must be hurtful, and probably fatal. The choice is between a certain good alloyed with a possible risk, and a certain evil, ending probably in death. What woman would not prefer the first alternative?

The injection of the perchloride of iron has been followed in my practice: 1st, in many cases in which flooding persisted in spite of the use of ordinary means, by instant arrest of the bleeding, and steady recovery. In a large proportion of these cases the patients have borne children subsequently.

2ndly, in several cases where profuse bleeding had taken place, it was also instantly arrested; phlegmasia dolens appeared; all recovered well in the end.

3rdly, in several cases where the patients were already *in extremis* from loss of blood, the injection stopped further bleeding, but death ensued. In these cases I was unable to see that the injection in any way contributed to the fatal issue. The patients were moribund. The remedy came too late.

The commentary which I would offer upon these three classes of cases is, that, of the first class, some women would clearly have died but for the remedy, whilst others were certainly spared an amount of blood which secured them against the severe secondary effects of bleeding.

That, of the second class, the supervention of phlegmasia dolens may possibly, in some cases, have been due to the extension of the thrombi formed in the mouths of the uterine sinuses by the action of the perchloride, but that on the other hand we cannot regard this thrombotic process as altogether injurious. It is undoubtedly often a conservative process, cutting off from the general circulation noxious matter generated on the inner surface of the uterus. And again, it must be borne in mind that phlegmasia dolens is by no means uncommon after severe flooding where the injection is not

used; and this is especially true of placenta prævia. Finally, some of these patients would probably have died. It was surely better to run the hazard of phlegmasia dolens.

That, in the last class of cases, those in which death ensued after the injection, the cause being collapse from loss of blood, recovery was not to be expected from anything less than the supply of that which was lost. Here the remedy is transfusion.

The practical lesson to be drawn from these unfortunate cases is, not to defer resort to the injection too long. It will, indeed, at almost any stage, stop the bleeding, but it cannot make up for the blood which has been lost; it will, indeed, often give the system time and opportunity to rally from the shock it has sustained, but it cannot recall the life that is ebbing away. Although, therefore, the injection of perchloride of iron will not seldom rescue women from death by flooding after other means have failed, it is important to use it betimes, before the stage of utter collapse, whilst there is still inherent in the system the power of reaction.

This end will be secured if the warning I have given as to the extent to which ergot, compression of the uterus, and cold should be trusted, be observed. If these agents be abandoned, the moment we observe that the expected response in uterine contraction is not given, he may then count upon the best results from injecting perchloride of iron. One more emphatic reason I would plead in favour of early resort to this treatment is, that it is not enough to save bare life, we must save all the blood we can. For this reason, and because I have acquired confidence in the efficacy and safety of this crowning remedy, I never now lose time in trying other means that may fail, and which, having failed, even partially, leave the patient worse by the quantity of blood lost. The growth of confidence in a new remedy is often slow; but I have no doubt that, in this instance, it will extend, and that this remedy will be generally adopted.

Dr. CLEVELAND thought one of the difficulties in the treatment of post-partum hæmorrhage consisted in determining when the means in general use should give way to the remedy recommended by the author. When one was single-handed, and had emptied the uterus of coagula, brought it under control by pressure, and applied ice, &c., it was not satisfactory to leave the patient for ever so short a time to prepare an injection, and perhaps run the risk of fatal relaxation. With the view, however, of meeting this difficulty he was provided with an 8-oz. india-rubber bottle, to which was easily attached a flexible male catheter. This could be used more readily than a Higginson's syringe, and with less risk of injecting air. There was a condition of the uterus occasionally met with after hæmorrhage to which he wished to allude, and which had not yet been explained. It consisted of alternate contraction and relaxation—the latter allowing the organ to elongate and be felt, perhaps, as high as the umbilicus; and yet when brought down by the hand no appreciable amount of blood was extruded. Under these circumstances what does the uterine cavity contain? He would inquire if the author had used emetics in uterine hæmorrhage, as he had himself witnessed the good effect of vomiting on more than one occasion. He would also ask if the free use of stimulants, especially at the commencement of flooding, was not open to objection?

Dr. ROGERS thought the thanks of the Society and the profession at large were due to Dr. Barnes for bringing before them his excellent paper on post-partum hæmorrhage, referring especially to the use of solutions of perchloride of iron as an important styptic. With every word of the paper he could most cordially agree, and could personally testify that the perchloride was a most valuable agent, and might be used without the slightest apprehension of ill effects. He had first used it in post-partum hæmorrhage about fifteen years ago, having failed with a strong solution of alum, and the result was most satisfactory. He had not since had occasion to employ it more than five or six times, but in every instance it was successful. He thought Dr. Barnes had omitted the mention of another useful means which his late friend, Dr. Mackenzie, had so strongly recommended, namely, galvanism, and on which he himself placed some reliance. He makes use of a syringe and long tube not unlike the apparatus of Dr. Barnes. One of his colleagues uses the styptic in an equally efficient, but more simple manner. This agent has been for years past used at the Samaritan Hospital for the arrest of uterine hæmorrhage, whether after miscarriage, the removal of polypoid growths, fibroid enlargements, or from whatever cause, and he had never observed serious mischief produced by it. He hoped the profession would fearlessly use it after the publication of Dr. Barnes' admirable paper.

Dr. Wynn Williams, whilst congratulating the author of the paper on the very lucid manner in which he had presented the subject for the consideration of the Fellows of the Society, at the same time agreed with all that had been stated; but was somewhat surprised to hear that the knowledge of the remedy perchloride of iron as an hæmostatic in hæmorrhage after parturition was as limited as the author seemed to suppose. It had been shown already by the previous speakers that such was not really the case, as they as stated had been in the habit of using it for some considerable time. He, the speaker, had been accustomed to use the perchloride of iron, he could not say for how long, in uterine hæmorrhages; not exactly in the same manner as the author of the paper, but in a way which he would take the liberty of designating the ready method, which he was induced to adopt by having heard the late Dr. Rigby in his lectures relate how a certain accoucheur on an emergency, when in charge of a patient, seized a lemon off the table, passed it through the hand already in the uterus, and squeezed out the contents, and by this means saved the life of the patient. The method which he had termed the ready method was to take a sponge, pour some of the tincture of perchloride of iron into it, pass it through the hollow of the hand already in the uterus, previously emptied of clots, and sponge the sides of the uterus well over, leaving the sponge if you pleased in the uterus, having, if thought necessary, a string attached, but in the two or three instances in which the sponge had been left it had always been expelled by the contracting uterus, which contraction it seemed to assist. This only necessitated the carrying of a bottle of perchloride of iron and, if wished, a sponge. He did not think that any objection would be raised to this method of applying the perchloride, as might possibly be by some to injecting a considerable quantity of fluid. Indeed, the only objection to the use of the saturated sponge, if, indeed, it can be considered one, is the stains left on the hands of the operator. These, however, are readily removed by a solution of oxalic acid or the salts of lemon, the active ingredient of which is the same.

Dr. J. Braxton Hicks said that during the reading of the paper scenes rose up before his mind (as he felt sure they would do before those of all others engaged in active and severe midwifery practice), scenes only too commonly witnessed. To the whole paper he most cordially agreed, it entirely and closely represented his views on the subject. There were, however, a few remarks he wished to add. In the first place, he thought there was a considerable difference in different cases as to the condition of the internal surface of the uterus after expulsion of the placenta. If the uterus be examined after death it would be found that in some the large apertures of the sinuses described by many authors were

absent. There were, of course, the arterial openings and those of their return veins, of considerable size certainly, but not very large; whereas in others it would be found that the sinuses in their oblique passage through the uterine walls occasionally abutted on the line of separation of the placental decidua. When the placenta was removed, then the feeble wall gave way, and severe loss would result unless the uterus contracted quite firmly. In the former case it did not require that severe uterine contraction, and the perchloride would readily act; in the latter case it would probably be found that even the perchloride would fail to arrest this great stream. Regarding its having to contend with enormous gushes, he believed that they were always the result of a preaccumulation which had been going on unobserved. He thought the varying state of the size of the vessels would explain that to which Dr. Cleveland had alluded, namely, a flaccid uterus without bleeding. There was a class of cases to which Dr. Barnes had not alluded, namely, placenta prævia, where the cervical portion was relaxed after delivery. Owing to the flaccid state of this part after labour in general, severe hæmorrhage was likely to occur, because of the insertion of the placenta there. In such cases it was that the perchloride was of much value applied to this surface. As to his own experience of the application he would say that, as soon as he had heard that Dr. Barnes was using it, he tried it. He had used it in a number of cases ever since, not only after delivery at full term, but in severe cases of miscarriage and abortions where the hæmorrhage was severe, and when the uterus had been emptied; it had always been attended by success as to the arrest of the bleeding, and in no case followed by any untoward symptoms. In only one case did death succeed, and this woman was dying when it was used. He had employed it in a similar manner to Dr. Barnes, but he had used it in a weaker state, four or five times diluted. He had found this very efficient; but if the hæmorrhage was obstinate he increased the strength.

Dr. Hall Davis was glad that he could add his testimony to the value of solutions of iron as styptics for injection into the uterus in more than usually obstinate hæmorrhage from that organ, whether they occurred after full term parturition, after miscarriages, or under other circumstances. Indeed, he had been in the habit of using them for several years. Scarcely a week passed that they were not resorted to among his hospital patients. He had used the pernitrate, the persulphate, and the perchloride of iron, and had found them about equally efficacious. He considered it very important that the uterus should first be emptied of any contained clots, in order that the styptic might fairly come into contact with the internal surface of the uterus. He knew there had been a prejudice against removing clots from the uterus

under the supposition that they might stop further bleeding. But, practically, this was not the case, for they prevent uterine contraction, invite further bleeding, and interfere with the due action of local styptics to the internal uterine surface. These styptics he had found so fully successful in cases most unpromising under previous treatment by ergot, cold, pressure, electricity, &c., that he thought we should always be prepared for their employment.

Dr. PLAYFAIR regretted that Dr. Barnes had not alluded in his otherwise exhaustive paper to what he (Dr. Playfair) considered the most important topic in connection with post-partum hæmorrhage, more important even than its cure, viz. its prevention. Nothing was more remarkable than the relative frequency with which this accident occurred under different practitioners. Some men were always having severe floodings to cope with, while others rarely, if ever, met with a case. This he attributed entirely to the different manner which the third stage of labour was dealt with. If the greatest care was taken to follow down the contracting uterus with the hand, to keep up firm and strong pressure, so as to squeeze off the placenta in the manner recommended on the continent, and which had previously been discussed in the Society, any amount of hæmorrhage was of the rarest possible occurrence; while if the uterus was left to itself, as too often was the case, until the placenta was thrown off, it might frequently be looked for. With regard to the use of the perchloride, he could only add his testimony to that of the many gentlemen who had spoken in its favour. He never could forget the admirable effect it had had in the first case he had used it, in which the patient was almost moribund, and all the usual means of arresting hæmorrhage had been tried in vain. He had since used it on several occasions, and always with the same success.

Dr. TYLER SMITH, after eulogising the paper of Dr. Barnes, wished to add a few words on the prevention of post-partum hæmorrhage. He believed that few cases of dangerous flooding would occur if it became a rule of obstetric practice to give, in all cases, a full dose of ergot immediately after the birth of the child. It would, in his opinion, be a vast improvement in obstetrics, both as regards the mother and child, if the forceps could be substituted for ergot, as now often given during labour, and if the ergot were administered habitually at the moment of birth, or while the head was passing the vulva. Besides the prevention of hæmorrhage, subinvolution of the uterus with its attendant evils would become less frequent. This rule of giving ergot had been extensively followed by his advice, and with the best success in India, where flooding was still more common than in this country.

Dr. AVELING feared that the styptic fluid might enter the circulation and produce thrombosis. He thought the principle good; but that the sponge plan used by Dr. Wynn Williams might be safer than the injecting method. Dr. Aveling would have liked to hear more of transfusion, which he believed was not practised as often as the success of the operation warranted.

The PRESIDENT thought the profession would be gratified in having, through the medium of this Society, the opinions of so many distinguished men on the subject of the treatment of uterine hæmorrhage—one of daily interest; and the Society was under great obligations to Dr. Barnes for the manner in which he had brought the subject forward. There could be no doubt that the injection of the perchloride of iron was a most valuable remedy in a certain class of cases, and after the decided opinions now expressed in its favour, its use would probably become more extended. As preventive of hæmorrhage he had great belief in pressure, and, in fact, the only cases in which he had seen hæmorrhage fatal under his own care, were cases in which, unusual attention to the child being required, the uterus had not been uninterruptedly watched over. Transfusion, to which Dr. Aveling had alluded, was adapted for cases of a somewhat different nature, when the hæmorrhage had ceased.

Dr. BARNES, in reply, said he had not forgotten transfusion. Feeling deeply that no woman should be allowed to bleed to death, he held that when bleeding had gone so far as to imperil life, attempt should be made to restore life by transfusion. He believed the application of this remedy ought to be very greatly extended. He saw a hope of overcoming the great difficulty of coagulation by mixing with the blood a solvent like the phosphate of soda, lately recommended by Dr. Hicks, or a few drops of ammonia, which Dr. Richardson had long ago used for the purpose. He had not touched upon the question of prevention; the simple problem set in the paper was how to deal with hæmorrhage when present. With regard to electricity he had preceded his friend the late Dr. Mackenzie. He had proved, as Radford had done before him, the power of Faradisation in causing contraction of the uterus; but he had abandoned it because it was inconvenient, often intensely distressing to the patient, and inferior to other means. As to Dr. Hicks' remarks upon the frequent absence of large openings of sinuses on the inner surface of the uterus, he reminded the Society that the obliquity of this opening rendered it very difficult to find them, and that Dr. Chowne and others, by injecting the vena cava backwards, showed that the water would escape in torrents on the uterine surface. If, then, the two conditions of relaxed uterine walls, and a pumping force behind were present, the vessels would open and give rise to flooding. With reference to priority, he must say that he was

surprised to hear such very general expressions of approval of the treatment; but that it was not yet a recognised plan was proved by absence of mention of it in our text-books. It appeared to have been first used by d' Outrepont; it was pointedly recommended by Kiwisch in 1840, his own first published recommendation of it was in his Lettsomian Lectures on 'Placenta Prævia,' in 1857, and of course he had used it before that date. In conclusion, he expressed his belief that the perchloride of iron would come into general use as a recognised plan of treating uterine hæmorrhage.

DECEMBER 1st, 1869.

Dr. Graily Hewitt, President, in the Chair.

Present—55 Fellows and 10 visitors.

G. G. Bantock, M.D., and George Rice Ord, M.R.C.S., were admitted Fellows of the Society.

The following gentlemen were elected Fellows of the Society:—William Cox, M.R.C.S.; Benjamin Duke, M.R.C.S., Clapham; Henry Hemsted, M.R.C.S., Whitchurch; P. R. J. B. Minns, M.D., Thetford; and Alfred Walker, M.B.

The following gentlemen were proposed for election:—Reuben Gross, M.D.; John Ligertwood, M.D.; John Scott, M.D.; John F. Wilkin, M.R.C.S.; and Burzorjee Dorabjee Burzorjee, M.B., Bombay.

Dr. Wiltshire and Dr. Selby Norton were appointed Auditors for the current year.

Dr. Meadows exhibited a large fibroid polypus removed by the single wire écraseur. Ten days previously this tumour had been completely intra-uterine, and the os closed over it. The use of Dr. Barnes's dilating bags had not merely induced dilatation of the os, but sufficient uterine contraction to cause extrusion of the tumour, which was then easily removed. Dr. Meadows considered the bags superior in their utility to the sponge and other tents.

Mr. J. A. TAPSON exhibited a placenta and knotted cord. The child was stillborn, but its movements had been felt six days prior to its birth.

Dr. CLEVELAND exhibited an apparatus for injecting solution of perchloride of iron into the uterus for post-partum hæmorrhage. It consisted of a six-ounce native rubber bottle, to which a flexible vaginal tube ten inches long was accurately fitted. After expelling as much air as possible by compression, the tube was introduced into a stoppered glass bottle containing about seven ounces of the iron fluid and the injecting bottle allowed to fill itself. The latter was again compressed without removing the tube from the residual fluid, and it was found after the second filling that both the tube and bottle were free from air. He suggested that the proportion of Liq. Ferri Perchloridi Fort., viz. one ounce and a half, should be carried in the glass bottle, and when the injection was required for use it would only be necessary to add the requisite amount of water. He believed that by thus administering the injection there was less risk of introducing air than through a Higginson's syringe.

Dr. WYNN WILLIAMS exhibited the heart and lungs of an infant who died when fourteen days old. The child was first seen by him when nine days old, the hands and feet being of a blue, almost purple, colour; the body of a pale bluish colour, at times the blueness becoming much deeper. It was considered a case of cyanosis, due, probably, to a patent foramen ovale.

On examination after death the heart was seen much larger than natural, lying across the chest; the base above and to the right of the right nipple, the apex below and to the left of the left nipple. On opening the right auricle the foramen ovale was found to be unclosed to above one fifth of its extent. The walls of the right ventricle were much thicker than natural, and from it the *aorta* was found to take its origin. The walls of the left ventricle

were found to be of the natural thickness, but considerably less than that of the right ventricle, the pulmonary artery taking its origin from this (the left) ventricle.

ON THE AGE AT WHICH MENSTRUATION COMMENCES.

By Walter Rigden.

(Communicated by Dr. Graily Hewitt.)

Statistics as to the age at which menstruation commences; obtained from women who applied at the University College Hospital to be attended in their confinement:

In 2696 cases menstruation occurred for the first time—

	CASES		CASES
At the age of 9 in	3	At the age of 18 in	150
„ 10 „	14	„ 19 „	76
„ 11 „	60	„ 20 „	29
„ 12 „	170	„ 21 „	7
„ 13 „	353	„ 22 „	3
„ 14 „	560	„ 23 „	2
„ 15 „	540	„ 24 „	0
„ 16 „	455	„ 25 „	0
„ 17 „	272	„ 26 „	2

From these cases it would appear most common at 14 years of age, then at 15, 16, 13, 17, 12, 18, 19, 11, 20, 10. The mean age in these cases is 14·96 years nearly.

FIBROID POLYPUS ATTACHED TO THE FUNDUS UTERI REMOVED BY ÉCRASEUR; RECOVERY.

By David Lloyd Roberts, M.D., M.R.C.P. Lond.,
PHYSICIAN TO ST. MARY'S HOSPITAL, MANCHESTER.

Dinah H—, æt. 35, from Newcastle-under-Lyne, began to menstruate at the age of 12, the menses appearing subsequently with due regularity and usually lasting for six or seven days. At the age of eighteen she was married, and has had two children, both at the full term, one in her twentieth, the other in her twenty-second year. She has never miscarried. Her general health has been good, and until within the last five years no symptom indicating uterine disease was observed, with the exception of an occasional leucorrheal discharge. During this period she suffered from menorrhagia and irregular metrorrhagia, which discharges later on were supplemented by a muco-purulent leucorrhœa of offensive odour. She complained of almost constant sacral pains, and after any particular exertion, such as walking a long distance or washing clothes, lumbar pains supervened. At times she was unable to evacuate the bladder, rendering the use of the catheter necessary; but there was no difficulty in defæcation. Cramp frequently seized her, especially in the right leg; and she was afflicted with more or less constant intra-pelvic pains. She experienced great difficulty and very much pain in locomotion, affecting the right leg and felt mainly in carrying the limb forward and turning the toes outwards. In flexing the thigh upon the trunk the pain was also much increased. This formed one of the most irksome symptoms caused by the affection. Dyspnœa was, shortly afterwards, added to her other sufferings. She now flooded more frequently and more copiously, and the muco-purulent discharge became excessive in quantity and its odour more fœtid. Two other very

severe attacks of flooding followed shortly afterwards, which induced extreme debility, and obliged her for some weeks to keep her bed. On August 24th last she became an in-patient of St. Mary's Hospital, and a large fibroid polypus, attached by a short thick pedicle to the fundus uteri, was discovered. She was operated on August 26th, 1869, for the removal of this tumour. The patient having been placed under the influence of chloroform, and the bladder having acted naturally a short time previously, several ineffectual attempts were made to draw down the growth for the purpose of attempting its excision. These failing, the chain of the écraseur was passed over the body of the polypus and made, not without considerable difficulty, to surround the short thick pedicle. This difficulty was owing to the distance of the pedicle from the external orifice, the uterus being high up, especially posteriorly; also to the small amount of space in the pelvis for the accommodation of the hand which it was found necessary to introduce into the vagina in order properly to apply the chain. In consequence of the resistance offered by the dense unyielding structure, the chain broke, so that a stronger one had to be selected for the next attempt. On this occasion it was pushed higher and nearer the attachment; it soon worked its way through the pedicle. Because of its great size and peculiar shape, it was found necessary to accomplish the extraction of the polypus by means of a pair of midwifery forceps. After much trouble this was effected with no more serious consequences than slight laceration of the perinæum. After plugging the vagina with pieces of lint soaked in a solution of the tincture of the perchloride of iron and bandaging the legs together, the patient was put to bed. No flooding, depression, nor bad symptom of any kind followed, and the only treatment deemed necessary after the removal of the tampon was the injection into the vagina of a syringeful of tepid water night and morning. Micturition was early performed without any inconvenience; and the bowels acted on the third day. During the entire period of conva-

lescence there was very slight vaginal discharge. By the seventh day the perineal rent had fully healed, and on the tenth day the patient was able to walk about the wards with perfect ease and complete absence of all the former painful symptoms. In due time the menstrual functions were performed normally in every respect, and there was no appearance of leucorrhœa. After a careful vaginal examination with the speculum, she was discharged from the hospital cured on the 14th of September.

The following are the measurements and weight of the tumour:

Length	6 inches.
Circumference . . .	$12\frac{1}{2}$ inches.
Weight	$24\frac{1}{2}$ ounces.

This case is interesting principally as regards the diagnosis. The tumour interfered mainly with the functions of organs on the right side and in the middle of the pelvis; for while there was considerable impediment to the flexion of the right thigh upon the trunk, owing to the pressure of the tumour on the psoas and iliacus muscles, and while the bladder and urethra were so affected that micturition was always difficult and sometimes impossible, the patient never had the least trouble or impediment in exercising the functions of the rectum. The crampy sensations were confined nearly altogether to the right leg. The shape of the tumour, bilobular as it were, with the larger lobule situated to the right and the smaller occupying partially the left half of the pelvis, fully accounted for and explained very satisfactorily the symptoms of pressure. It was my intention to have removed this tumour by excision, but on more complete examination of the case under the influence of chloroform the pedicle of the growth encircled by the cervix uteri was found so high up that it was impossible to pass the fingers to guide any instrument to sever it. This induced me to use the écraseur, and is an illustration of the great advantage of this comparatively modern method of removing large pediculated fibroid growths from the

del Dr Westmacott direx.

W. West lith.

womb. The size and breadth of the pedicle, the successful removal of the tumour, and the rapid recovery of the patient, are, perhaps, the best answer to the question of the further advantages of the écraseur over the slow method by ligature. For the constitutional irritation and risk of pyæmia from the use of the ligature to such a broad pedicle would have been very great, besides the length of time that it would have required for separation of the growth. The fact of the tumour having been extracted by the aid of midwifery forceps was owing simply to its large size, peculiar shape and situation, lying lengthwise in the pelvis and apparently pushing the womb upwards. It is thought by some authorities that abortions are frequently the cause of polypi. D. H— never miscarried.

The shape of the tumour is well shown in the accompanying (reduced) drawing.

CASE OF PUERPERAL FEVER TREATED BY THE INJECTION OF AMMONIA INTO THE VEINS, FOLLOWED BY RECOVERY.

By W. Tyler Smith, M.D.,
PHYSICIAN-ACCOUCHEUR TO ST. MARY'S HOSPITAL, ETC.

Janet K—, a single woman, æt. 20, was in labour when brought to the hospital, November 1st. The pains being feeble and the head low down in the pelvis, she was delivered by the forceps. The placenta adhered, and required the introduction of the hand for its separation and removal. She went on well till November 5th, when the pulse rose to 110. From this date to the 12th she became progressively worse. The symptoms were—fetid discharge and then suppression of the lochia, followed by delirium; rigors; a red glazed tongue; abdominal pain; great tympanitic distension; disappearance of the milk; diarrhœa; vomiting

and rapid respiration. On the 12th she became listless and apathetic, and appeared to be sinking. The pulse had ranged for several days from 120 to 135. Considering her to be in imminent danger, I determined to try the injection of ammonia into the veins, as practised by Dr. Halford in Australia for snake-bite. The operation was accordingly performed at 7.45 p.m., by my resident assistant, Mr. W. Cox, and Mr. Milner Moore, the senior house-surgeon to St. Mary's. A solution of one part of liq. ammoniæ to three parts of water was injected to the extent of half a drachm into one of the veins of the right forearm. She did not appear to feel the puncture, but as soon as two or three drops had been injected she roused and complained of severe pain in the opposite arm. When the operation was completed there was very great pain over the whole body, with intense smarting of the right arm. This continued without abatement for several hours. The sickness ceased at 11 p.m., but the bowels were moved four times in the course of the night. The pain subsided towards morning and she got a little sleep.

November 13th, 10.30 a.m.—The abdomen had much diminished in size and the pain was less. The pulse continued weak, but had fallen to 100. The next day, though very pale and weak, she said she felt much better and was quite sensible. Pulse 108. She complained a little of soreness about the throat. The right arm, at the place of puncture, was red and swollen, and the veins of the whole arm were distinctly mapped out. Until this time she had been nourished chiefly by enemata, but she was now able to take food by the mouth without sickness. The pulse rose in the evening to 120, but afterwards subsided.

15th.—She had improved; the tongue was getting natural, the pulse was 100, and the abdomen less in size.

17th.—She was still progressing favorably; a small ulcer had formed on the right arm, at the seat of puncture.

20th.—The appetite being good, the tongue clean, and the pulse 84, she was allowed to have some chicken, but this disagreed with her. She had abdominal pain; the

pulse rose considerably; the tongue became red and irritable; the wound looked inflamed, and she had a slight rigor.

22nd.—She had again improved, the pulse being 104. From this time she went on favorably and is now convalescent. The wound is quite healed, and the veins of the arm are in a natural condition. She looks weak and pale, and bears the evident marks of recovery from a grave and serious disorder.

The treatment, before resorting to the injection of ammonia, consisted of syringing the vagina and uterus, leeching over the seat of pain, calomel and opium, and opiate injections to check the diarrhœa, hydrocyanic acid to allay sickness, and after the first day or two ammonia and the free administration of stimulants.

Of course, I know it is open to any one to say that this is but a single case, that I have over-estimated the danger, and that it was not genuine puerperal fever. I can only say, in reply to such objections, that I formed my diagnosis upon the facts as stated. I believe I have never seen a patient in a similar condition recover. Puerperal fever is such a terrible malady, and so intractable to ordinary treatment, that I have felt it incumbent upon me to place the case before the Society. No doubt, as the result of this, the plan will soon be tested, and its effects estimated at their right value.

I do not at present offer any opinion as to whether this injection of ammonia into the veins acted in the way of stimulant or antidote. It appears to me, as far as I can judge from this case, that injection into the blood will probably admit of some wide application in the treatment of the most important diseases medical men have to deal with in practice. I allude to intravascular diseases, which kill mainly by the depression of the nervous system. By this means we may make a nearer and more effective appeal to the vital powers than by any other therapeutical means to which we can resort.

Dr. AVELING would have liked a fuller account of the history of the plan of injecting medicinal fluids into the veins, as it was a method of treatment of much antiquity.

Dr. BARNES said reference to the history of venous injections did not diminish the merits of applying this method to the treatment of puerperal fever. In this disease it was often difficult to get remedies absorbed; the only hope seemed to be in direct injection into the vascular system. He then adverted to the practice of saline injections in cholera, by which many lives had been saved. At the last meeting of the Society he had stated his opinion that the injection of saline fluids and transfusion ought to be, and would be, largely extended, and in his work on obstetric operations, now through the press, he had advised it in certain cases of puerperal convulsions, fever, and obstinate vomiting. He doubted whether the fluid used by Dr. Smith was the best. He should prefer a fluid like Dr. Little's, made of similar specific gravity to that of the blood, adding a little ammonia and alcohol. He thought the indication was to carry the ammonia in a considerable bulk of fluid, not concentrated.

Mr. SPENCER WELLS said he had been much struck by Dr. Halford's reports, and last March he had injected half a drachm of liq. ammoniæ into one of the veins of the arm of a woman two days after ovariotomy. The pulse and temperature had risen to 140 and 102·8°, with the usual signs of fibrinous deposit in the heart. Scarcely more than a momentary revival followed the injection, nor more after another by Dr. Junker two hours afterwards. A large fibrinous clot was found after death, filling up the left ventricle. Mr. Wells suggested that, if Dr. Smith's example is followed, great care should be taken only to inject ammonia where there is an excess of fibrine in the blood; to inject it in cases of any low form of fever or blood-poisoning, where the breath exhaled is charged with ammonia and the blood is already too fluid, would be excessively dangerous.

The PRESIDENT observed that the Society was much indebted to Dr. Tyler Smith for bringing this interesting case forward. One swallow did not make a summer, but new facts were always deserving of attention.

ON THE COMPLICATION OF PREGNANCY WITH OVARIAN DISEASE.

By T. Spencer Wells, F.R.C.S.,

SURGEON IN ORDINARY TO HER MAJESTY'S HOUSEHOLD; SURGEON TO THE SAMARITAN HOSPITAL, ETC.

At the meeting of this Society last October Mr. Warn exhibited an ovarian cyst which had been removed after the death of a woman in whom pregnancy had been complicated with the ovarian disease. Delivery was effected by turning. The woman died, and after her death rupture of the cyst was discovered.

During the interesting discussion to which this case gave rise, very opposite opinions were expressed as to the treatment which should be adopted in cases where pregnancy is complicated with ovarian disease. One speaker thought it was seldom necessary to interfere at all; that pregnancy and ovarian disease might go on together, and serious trouble arise in only a small per-centage of cases. Others advocated the early induction of premature labour, on the grounds that rupture of the cyst, or its gangrene from rotation of the pedicle, were apt to occur under the pressure of the enlarging uterus, while relief was often fonnd in the advent of spontaneous premature labour. Other speakers were in favour of tapping the ovarian cyst rather than inducing premature labour, thus anticipating the dangers of rupture or gangrene of the cyst without sacrificing the child. And the question was opened whether, when rupture of an ovarian cyst into the peritoneal cavity has actually taken place during pregnancy, ovariotomy alone, or ovariotomy and the Cæsarian section together, should be performed.

These questions are of such vital importance that I have prepared for the consideration of the Society some account of cases which have fallen under my own observation, and

which may assist us in arriving at some general principles or useful guides in future practice.

With the hope of restricting the discussion to questions of treatment only, and in order to compress this paper within moderate limits, I must pass over very hastily the branch of the subject relating to diagnosis—the complication of pregnancy with ascites, with fibroid tumours of the uterus, and with other abdominal and pelvic tumours, innocent or malignant, renal, hepatic, splenic, mesenteric, or aneurismal, as distinguishable from ovarian tumours complicating pregnancy. The consideration of this branch of the subject would more than suffice for the time of our meeting.

In commencing the study of the treatment of these cases we naturally examine the assertion that no treatment at all is called for; that ovarian disease and pregnancy may, as a rule, be allowed to progress together without interference. I might support this doctrine by the fact that I know one woman who, during the slow progress of an enlarging ovarian cyst, has gone through five pregnancies, has borne five living children without unusual difficulty, and has never yet had the cyst tapped, nor has labour ever been prematurely or artificially induced; and by the fact that in another case where I performed ovariotomy successfully fifteen months after the birth of twins, the patient had begun to enlarge six months before marriage, and had only suffered from her excessive size during this pregnancy; and by the fact that a patient, upon whom I performed ovariotomy with success in the fourth month of pregnancy, after rupture of the cyst and peritonitis, had borne six living children during the progress of the cyst before its rupture. But I must regard these cases as exceptional, for I cannot remember one other case where pregnancy complicated with ovarian disease has gone on to its natural termination in the birth of a living child; or where, in consequence of non-interference, great suffering has not arisen during or after labour, or very grave danger from rupture or rotation of the cyst; or where it has not been necessary to guard

against threatening danger, and either to tap the cyst or to induce premature labour.

In the first three cases, which I now proceed to narrate, death followed the spontaneous rupture of an ovarian cyst in or before the seventh month of pregnancy.

Case 1.—On the 26th of July, 1864, I saw a lady, 29 years of age, the wife of a medical man and mother of three children, the youngest of whom was eleven months old. The catamenia had ceased eighteen weeks before my visit, and the usual symptoms of early pregnancy followed, but with severe paroxysms of pain in the right groin and right side of the abdomen. Dr. Ballard had been consulted on the 13th of June, and he afterwards informed me that he then detected "fulness, with a hard, irregular tumour, partially fluctuating and somewhat tender, in the right flank, movable and dull on percussion, the fundus of an enlarged uterus being palpable above the pubes, with resonance between it and the tumour." As the tumour grew, it extended across the hypogastrium and obscured the enlarging uterus, producing changes in the physical signs and increased sufferings, which led to different opinions being expressed as to the nature of the abdominal enlargement, and to my being consulted. Considerable doubt having been expressed as to whether a tumour which reached upwards about midway between the the pubes and umbilicus was this enlarged uterus or not, I introduced the sound to the extent of six inches, having previously considered in consultation that if this proceeding should lead to abortion the result would not be undesirable. The fœtal heart and placental murmur not being audible, doubt was still felt whether the enlargement of the uterus was due to pregnancy. The uterus was pushed a little over to the left side; while on the right, not crossing the median line, an elastic tumour extended upwards beneath the false ribs, and could not be separated by percussion from the liver. I suggested that if premature labour did not come on this tumour should be punctured. I did not see the patient again; but I have

since heard from Dr. Ballard that on the 11th of August, a fortnight after my visit, he "distinctly felt the movements of a child to the left of and below the umbilicus. The patient had by this time lost flesh considerably, but her pain had been tolerable, and for some days she was free from it altogether. On the 26th of September it returned with great severity, with evidence of peritonitis. On the 28th she was believed to be in labour, and was seen by Dr. Oldham and Dr. Barnes. The membranes protruding, they were ruptured, and some hours afterwards a female child was born, which lived twenty-four hours. The symptoms of peritonitis continued, and the patient died four days after the delivery."

After death Dr. Ballard found a very large cyst of the right ovary, occupying the whole of the right side of the abdomen, and extending four inches to the left of the median line. It was flaccid, as if partially emptied, and a large quantity of bloody serous fluid lay in the lower part of the abdominal cavity. The pedicle, an inch and a half long, was twisted into a sort of rope, and the walls of the cyst were infiltrated with blood. Within the cyst there was much bloody serum and several very firm clots. Some of the contents of the cyst had evidently escaped through an opening in a very thin part of the cyst wall posteriorly, and had, no doubt, caused the peritonitis which proved fatal.

Case 2.—In May, 1868, I went to Stafford to see, in consultation with Dr. Day, a lady who was in the fifth month of pregnancy, and was also suffering from an ovarian tumour, which had been discovered by her husband on the night of marriage in October, 1866. She was twenty-four years of age, had long suffered from hysterical attacks, but nothing had led to any examination of the abdomen until the movable tumour in the right iliac region was discovered, of which she appeared to be quite ignorant, and said she had never noticed. It was about the size of a very large orange. Dr. Oldham, who saw it a few days afterwards, considered it to be an ovarian tumour. From the

time of marriage, the tumour evidently but slowly increased in size, and was the seat of frequent darting pains. Eight months after marriage she became pregnant, miscarried six weeks after conception, and recovered without any unfavorable symptom. From this time till the end of 1867 there was no decided increase nor other change in the tumour. Then a second pregnancy occurred. She began to suffer from intense pain in the tumour, and became restless and desponding. It was in the fifth month of this second pregnancy that I saw her, and found an ovarian cyst as large as an adult head above and to the right of the uterus. At that time there was no very great suffering, but I advised that the cyst should be tapped if relief was called for by any increased distress. At about the sixth month premature labour came on spontaneously, and she was delivered of a dead child. From the period of her delivery many of her symptoms subsided; she slept well, was cheerful, and the tumour was less painful. But after about a week she began to complain of more pain in the tumour, and it increased rapidly in size. Her hysterical symptoms became aggravated to a degree almost amounting to mania. Dr. Day informs me that "the tumour, although increasing rapidly in size and becoming very tense and hard, was not so large as to render the abdominal walls very tense, or to press upon other organs so as to interfere with the performance of their functions. The pulse, which had fallen in frequency after the premature delivery, again became weak, and rose to 120. This state continued without alteration for about a week or ten days. One morning, after turning somewhat suddenly in bed, she cried out that something had broken inside, and died almost instantly. No post-mortem was made, but the abdomen was found to be perfectly flaccid. Not a trace of the tumour could be felt."

Case 3.—On the 16th of January, 1869, I met Dr. Finch, of Blackheath, and Dr. Furley, of Malling, in consultation upon a lady, 24 years of age, who had been

married about nine months. Between two and three months after marriage the catamenia ceased, she increased in size, and considered herself pregnant. After a long drive, which shook her very much, on the 20th of November, she was seized at night with intense pain. Dr. Finch was sent for and told that abortion was threatening, but he found her suffering from a severe attack of acute peritonitis, the abdomen being greatly distended, and containing a tumour the size of the uterus at nearly the full period. There was no injection of the mammary areolæ, nor any other sign of pregnancy. The next day she was seen by a distinguished physician-accoucheur, who could not satisfy himself as to the existence of pregnancy. The acute symptoms subsided, and on the 23rd of November the physician just alluded to and another eminent physician-accoucheur, who had seen the lady some years before, met Dr. Finch in consultation.

This gentleman, although admitting some doubt, expressed himself pretty confidently as to pregnancy, on account of the soft cushiony state of the cervix uteri, seldom found in young newly married women when not pregnant. He said that he had seen the patient in 1865, who had then told him that, five years before that time, after a chill when dancing, she had felt pains which had been followed by enlargement in the left groin. A tumour, irregularly nodular, not fluctuating, and movable, was felt in 1865, reaching nearly to the umbilicus in the centre, and nearly up to the false ribs on the left side. He then regarded the tumour as probably ovarian, and considered that it had not much enlarged since, but had become complicated with pregnancy. After this consultation the health improved, and, notwithstanding some slight symptoms of peritonitis, on several occasions she was able to walk about her room. The abdomen gradually increased in size, and at my first and only visit I could distinctly trace the boundaries of three tumours, or separable portions of one tumour—one central, extending upwards half way from the pubes to the umbilicus; one on the left side, extending into the left flank and reaching about an inch above the umbilicus; and one on

the right side, extending nearly to the false ribs. The central tumour felt exactly like a pregnant uterus. The tumours to the right and left were not fluctuating, but they felt softer than fibroid tumours of the uterus usually do. The cervix uteri was shortened and softened, strongly supporting the belief in the pregnancy. But no sound of fœtal heart nor placental murmur could be detected. To the left of the cervix, projecting towards the bladder, a hard nodulated tumour, as large as three or four walnuts, closely connected with the body of the uterus, could be felt. This, I felt sure, was a fibroid outgrowth from the uterus, and I made a diagram illustrating my diagnosis of pregnancy with a small hard fibroid outgrowth from the body of the uterus, and two softer tumours, which might be either ovarian tumours or soft uterine fibroids; and I advised that the physicians who had seen her six weeks before should see her again, and consult as to the propriety of inducing premature labour, as I did not think that tapping could lead to any considerable diminution in the size of either of the tumours.

A fortnight after this advice was given, Dr. Finch distinctly heard the fœtal heart. This was on the 29th of January. On the 8th of February, at four in the morning, after a quiet day, free from much pain, she awoke after three hours' sleep, complained of pain, asked for fomentations of hot water, then coughed, fell back, and suddenly died. Dr. Finch adds, "I presume, from the bursting of a large cyst, but I had no opportunity of making a post-mortem examination."

Cases 4 and 5.—I will not take up time by the particulars of these cases, the simple facts being that two patients who were pregnant had also large ovarian cysts, which I thought should be emptied by tapping, but my advice was not followed. Both women suffered excessively from distension, had lingering labours and still-born children. In both ovariotomy was performed a few weeks after delivery, successfully in one, with a fatal result in the other.

I have also notes of five cases of patients whom I have tapped during pregnancy, one of them three times, one twice, and three once. In all these women great relief was afforded by the tapping, no ill effect of any kind was observed to follow it, and in all cases the children were born alive after labours of moderate duration. One of these cases is of sufficient interest to deserve a short report.

Case 6.—In November, 1865, I performed ovariotomy with a successful result upon a married woman, 40 years of age, four months after the birth of a living child at the full term of pregnancy. I had tapped this woman two months before her delivery. She was sent to me by Mr. Ward, of Newark, in May, 1865. He had tapped her twice, removing nearly four gallons of fluid each time. The first tapping was in April, 1864, the second in February, 1865. When I saw her first she had been married three years, and had not had a child. The catamenia became scanty about the time of her marriage, and "*got less and less till they left her,*" in November, 1864. The abdomen was greatly distended, and nothing could be detected except a very large ovarian cyst, nor could the patient believe that she was pregnant. But the cervix uteri was found to be short and velvety, and *ballottement* was very distinct. The mammary areolæ were injected, the corpuscles well developed, and a little colostrum was squeezed from the nipples. As the suffering from distension was very great and immediate relief necessary, I tapped on the 13th of May, and removed eighteen pints of fluid. The enlarged uterus was then felt nearly up to the umbilicus, the collapsed cyst to the left, and the fœtal heart was heard below and to the left of the umbilicus. Immediate relief followed the tapping. A healthy child was born on the 20th of July, at the full term of pregnancy. The patient was too weak to nurse it. The cyst refilled, and I removed it in the Samaritan Hospital on the 29th of November, 1865. There were very extensive adhesions, but the patient made an excellent recovery, and

had another child in September, 1867. I heard from her in November, 1869, as being quite well.

Case 7.—As I published a very full report of this case in the 'Medical Times and Gazette' of September 30th, 1865, I need not do more now than point out its bearing upon the question of the performance of ovariotomy during pregnancy. In this case I entirely overlooked the coexistence of pregnancy with ovarian disease, and after the removal of an adherent multilocular cyst of the left ovary, weighing about twenty-eight pounds, I felt what I thought was a cyst of the right ovary, tapped it, and then found that it was the gravid uterus. As this stage of the operation is of some importance in the history of the Cæsarian section, being, I believe, the first case in which the opening in the uterine wall was closed by sutures, I quote the following passage from the report published at the time:

"Some two or three pints of bloody fluid having escaped through the canula, the tumour became much less tense; and on bringing it up to the surface I saw the Fallopian tube passing from its upper part towards the left side, and knew at once that I had punctured the uterus. On withdrawing the canula, a soft, spongy, bleeding mass protruded, and on putting in my finger to push this back and examine the uterine cavity, the anterior wall of the uterus—which was very soft and friable, as if it had undergone fatty degeneration—gave way along the middle line from the puncture (which was near the fundus) for an extent of from three to four inches down the body towards the neck. With very slight pressure a quantity of liquor amnii and a fœtus of about five months escaped. I then easily peeled off the placenta from the inner surface of the uterus. The organ did not contract, and there was free bleeding from three vessels close beneath the peritoneum at the lower angle of the rupture in the uterus. These vessels were secured by three silk ligatures. Oozing still going on from the surface where the placenta had been attached, I made a free opening into the vagina by passing my finger from above

through the cervix and os, and then put a piece of ice into the uterus, and held it within by firmly grasping the organ, which then contracted. I then brought the peritoneal edges of the tear in the uterus together by an uninterrupted suture of fine silk, one long end of which I had previously passed into the uterine cavity, and out through the os into the vagina. By seven or eight points the edges were brought accurately together, and the other end of the silk was brought out through the opening in the abdominal wall, with the ends of the three ligatures on the vessels in the uterine wall close to the pedicle, and were tied to the clamp."

Any one interested in the progress of this patient after this complicated operation may find a very full report in the journal to which I have referred. All I need say now is that the patient completely recovered. She went to the Convalescent Hospital at Eastbourne thirty-three days after operation, and I have seen her several times since in excellent health.

The interest of this case, in relation to the subject for discussion this evening, is in its bearing on the question, "What should be done when a pregnant uterus is discovered during some stage of ovariotomy?" My answer would be, "Let it alone." But in a case of Dr. Atlee's, in 1850, ovariotomy performed in the second month of pregnancy was "followed by such great irritability of stomach, in consequence of the state of pregnancy, that she could not be nourished, and she died, thirty days after, of starvation." And in a case by Mr. Burd, of Shrewsbury, in 1847, of ovariotomy performed between the third and fourth months of pregnancy, abortion took place two days after operation, and was followed by alarming symptoms, lasting several days. Still, the patient recovered. So Dr. Marion Sims performed ovariotomy in the third month of pregnancy, and did not detect pregnancy until the ovarian tumour had been removed. The patient recovered well, went the full term, and was safely delivered of a fine child.

Supposing the operator has penetrated the uterus, if any

conclusion can be drawn from the case in which I made this mistake and emptied the uterus, and two other cases in which the same mistake was made by other surgeons, who did not empty the uterus, but closed the puncture in its wall by wire sutures, both patients having died after aborting, while mine recovered, it would appear to be the safer practice to empty the uterus.

The last case which I have to bring before the Society is one where I performed ovariotomy successfully in the fourth month of pregnancy after rupture of the cyst and peritonitis. This case has been reported by Mr. Bateman in the 'Lancet' of September 18th, 1869.

Case 8.—The wife of an hotel-keeper, 36 years of age, mother of eight children, first consulted Mr. Bateman on the 23rd of July, 1869. About a fortnight before this, an abdominal tumour, which had been slowly increasing after the birth of twins sixteen years before, and had not prevented the birth of six other children, had suddenly and rapidly increased in size after an attack of severe abdominal pain and tenderness with sickness and fever. When Mr. Bateman was called in he considered "the case was full of peril, for, although the abdominal tenderness was subsiding, the effusion was increasing. There was considerable difficulty of breathing on lying down, and great restlessness, with scanty and deep-coloured urine, abounding in lithates." Mr. Bateman's diagnosis was "ovarian tumour on the right side, ascites, pregnancy of about three months' duration, and extensive recto-vaginal protrusion." On the 13th of August I saw the patient with Mr. Bateman by his desire, and entirely concurred in his diagnosis as to the presence of an ovarian tumour with free fluid surrounding it in the peritoneal cavity, and depressing the recto-vaginal pouch, and in the existence of pregnancy about the commencement of the fourth month. "We also came to the conclusion" (I now quote from Mr. Bateman) "that the fluid in the peritoneal cavity was ovarian fluid, the sudden attack of pain when I was first called in having been caused, in all proba-

bility, by the rupture of part of the wall of a multilocular cyst, and the escape of the contents of a large cyst. Pain, tenderness, raised temperature, rapid pulse, dry tongue, and sickness, all pointed to diffused peritonitis and a condition requiring immediate relief." On the following day I performed ovariotomy, most ably assisted by Mr. Bateman, by Dr. Jagielski, and by Professor Neugebauer, of Warsaw, Dr. Junker administering bichloride of methylene with his usual care and success. Our diagnosis was completely verified. There was general injection of the peritoneum, but no recent lymph. The only adhesion was to omentum. The tumour, with its contents and the fluid surrounding it, weighed altogether thirty-seven pounds. I was extremely careful to cleanse the peritoneal cavity completely from all ovarian fluid by repeated sponging before closing the wound.

The patient recovered perfectly well, went from London to Ramsgate twenty-eight days after the operation, and arrived there with very little fatigue. She returned in excellent health, and pregnancy has since gone on without any unusual symptom.

Postscript.—In the 'Lancet' of March 19th, 1870, Mr. Bateman states that this patient was safely delivered of a living child on the 18th February, after a natural labour, and went on well afterwards.

Careful consideration of the cases just brought before the Society will lead, I think, to the following conclusions :

1. Pregnancy and ovarian disease may go on together, and may end in the birth of a living child and the safety of the mother.

2. But in a large proportion of cases, probably in nearly all where an ovarian tumour is large, there is danger of abortion; or, if the pregnancy proceed to the full term, of lingering labour and a still-born child, and throughout the later months of pregnancy there is danger of sudden death to the mother from rupture of the cyst or rotation of its pedicle.

3. Spontaneous premature labour may not save the mother from these perils, and the induction of premature

labour artificially almost implies sacrifice of the child with considerable risk to the mother.

4. There is no proof that tapping an ovarian cyst is more dangerous during pregnancy than at any other time; and it will generally afford immediate relief to distension at a very slight risk to the mother, and lead to the natural termination of pregnancy in the birth of a living child, if proper precautions be taken to prevent the escape of ovarian fluid into the peritoneal cavity, and the entrance of air into this cavity and into the cavity of the cyst.

5. If an ovarian cyst should burst during pregnancy, removal of the cyst and complete cleansing of the peritoneal cavity may save the life of the mother, and pregnancy may go on to the full term.

6. Of three cases on record where a pregnant uterus has been punctured during ovariotomy, the only recovery was in the one case where the uterus was emptied before the completion of the operation.

CASES OF PREGNANCY ASSOCIATED WITH OVARIAN CYSTIC DISEASE.

By J. Braxton Hicks, M.D., F.R.S.,

PHYSICIAN-ACCOUCHEUR AND LECTURER ON MIDWIFERY AT GUY'S HOSPITAL; PHYSICIAN TO ROYAL MATERNITY CHARITY; EXAMINER IN MIDWIFERY AT UNIVERSITY OF LONDON, ETC. ETC.

During the discussions at the October meeting of this Society on a case of pregnancy and ovarian disease I remarked that I thought that, until we had accumulated reports on a larger number of cases than we then possessed, we were not in a position to say what should be the rule of practice in such a combination of disease—whether it were better to tap the cyst, or to induce premature labour in the event of some relief being required. Some speakers, however, thought that the dangers in any case of the concurrence of the two conditions were such as to make it safer for us to induce

labour; adding still further, as a set-off for such a procedure, that the fœtus is generally prematurely expelled, and that frequently in a dwindled state, where the case is left to nature. Instances of the dangers were mentioned in proof of the validity of these opinions.

I stated, as the result of my own observations, that in no case had I seen any evil consequences arise where ovarian disease occurred with pregnancy.

As it is very desirable that we should ascertain the real amount of danger to be expected in these cases, I have ventured to bring the records of such cases as have come before me of which I have perfect knowledge; others, of which I have no clear account to give, I have omitted; but in none have I seen trouble arise.

Case 1.—Mrs. D—, Bermondsey. Primipara. Was noticed after delivery to be much larger than natural. I saw her about two weeks after, and found an ovarian cyst occupying the greater part of the abdomen. After eight weeks she underwent ovariotomy, but subsequently died. The cyst was simple.

Case 2.—Was a servant of Dr. Wilks, having a large ovarian tumour before marriage. It was about the size of a full-time pregnant uterus. Ovariotomy was proposed, but she preferred matrimony, and in due time was delivered of a full-time child, healthy and living. Subsequently she was twice delivered, without difficulty, of live full-term children.

Case 3.—Mrs. H—, Highgate. Multipara. Was in her seventh month of pregnancy; so enormously distended by an ovarian simple cyst that relief was imperatively demanded. The uterus was pushed over to the right side. I tapped the cyst, drawing off about two pailsful, of average size, of fluid. She had no bad symptoms after, and was delivered at full term of a live healthy child.

Case 4.—Mrs. R—. Multipara. Had had a polycystic

ovarian tumour for some time, when she became pregnant. She went on to full period, and was delivered of a live child. The cyst after delivery increased, and soon began seriously to incommode her. However, her pregnancy was attended by no further trouble than the mechanical effect it caused.

Case 5.—Mrs. K—, Newmarket. Multipara. I was called to see her suffering from an ovarian cyst of about five inches' diameter, which had recently been tender and irritated. As it was but small and in this condition, I recommended nothing to be done for some time. About a year after, she became pregnant, and her medical man informed me that the swelling was the same up to that date. She was subsequently delivered and seen by Mr. Spencer Wells, who found, instead of a cyst, a solid tumour having the characters of a fibrous tumour. The fluctuation was very distinct when I saw her, and there was every reason to believe continued through the early months of pregnancy.

Case 6.—The other case is included by Mr. Spencer Wells in his series. I saw her shortly after delivery with twins; she was enormously distended with fluid, apparently in a cyst, but certainly then very feebly resisting. It was surprising how the abdomen could have contained more than the cyst, still more amazing how it could have held twins besides.

Thus, we have, excluding the last, seven pregnancies without any serious accident to mother or children.

Two of them occurred in primipara, where it might be expected the danger from pressure to be the greatest.

These, however, are brought forward, as before stated, as a slight contribution to our knowledge of the subject. We must attain, I think, a greater number before we can draw any inference sufficiently strong to lay down any rule for practice, especially when so important a measure as the induction of abortion is under contemplation.

Dr. BATHURST WOODMAN remarked that the bursting of thin-walled ovarian cysts from muscular movements was by no means uncommon, even when there was no complication with pregnancy. He had known several such as Medical Registrar of the London Hospital, and had published a case of recovery from this accident in the 'Medical Times and Gazette.' He knew, also, of other cases of recovery, and therefore thought the relative frequency of these terminations in the unimpregnated state was an important element of consideration before settling the treatment of such cases when pregnancy supervened.

Dr. PLAYFAIR said that it was necessary to consider the dangers of ovarian tumours, not only in relation to pregnancy itself, but also with reference to labour. It might be within the recollection of some of the Fellows that two years ago he had read a paper on "Labour complicated with Ovarian Tumour," in which he had collected the details of 57 cases. The danger of this complication would be seen from the fact that 13 out of the 57, or about 1 in every 4 cases, had proved fatal; and this great mortality was, no doubt, due to the contusion and bruising to which the tumour was necessarily subjected during the pains. It was to be remembered, however, that these were only cases in which the tumour more or less occupied the pelvis, and proved an obstacle to the passage of the child. It was quite clear that the best treatment was puncturing the cyst, since all the cases in which this had been done, seven in number, recovered. It was probable that small tumours, the existence of which had not previously been suspected, were more likely to cause actual obstruction than large ones, since the former might readily prolapse and become impacted before the presenting parts, while the latter would be more likely to occupy the abdominal cavity. This might account for the fact that in none of the cases collected by him did the existence of the tumour seem to have been diagnosed before labour began.

Dr. MURRAY said that, some years since, he had under his care a case of pregnancy with ovarian disease, and at the eighth month he induced labour, and under chloroform delivered with the long forceps. He did this to prevent possible rupture of the cyst during the pains of labour, and to avoid too much pressure by the full development of the uterus at the full time. Both mother and child did well, and he subsequently performed ovariotomy on the same patient successfully. He noticed that during gestation the ovarian cyst did *not enlarge*, but did so rapidly after parturition. He could not see the advantage of tapping in these cases, as a doubt would always exist as to the nature of the disease, which, if solid, or nearly so, more harm might be done by puncturing the tumour and getting its contents in contact with the peritoneum.

Mr. BATEMAN remarked that he had seen two cases of preg-

nancy complicated with ovarian disease which had impressed him strongly with the conviction that such a condition was full of danger. The more recent of these cases had been published by him in the 'Lancet' of 18th September, and was the one in which Mr. Spencer Wells had successfully removed the right ovary in the fourth month of gestation. Before the operation this patient suffered very severely from the symptoms there described. Emaciation was going on markedly, and her life was in considerable jeopardy. Since then she had recovered her good looks and was still going on towards her full time. The other case was as follows:—Mrs. C—, primipara, well formed, but of a strumous family and personally rather delicate, was seized with labour-pains in the night of 1st and 2nd of September, 1845. I was sent for in the night, and found a natural presentation at the brim of the pelvis. She had satisfactory pains during the day, and I saw her four times, but found very little progress was made. On the 3rd the labour was still going on; Dr. Conquest saw her with me, and advised quietly waiting for the present. The pains continued on the 4th without the head fairly entering the pelvis, and, fearing she would become exhausted, I perforated the cranium, and delivered her at 11.5 p.m. of a male child, after a labour of about sixty-nine hours' duration. She needed catheterism on the two following days, and then went on slowly but satisfactorily improving until the 15th, when her nurse was attacked with erysipelas of the face. This alarmed her very much, as she knew erysipelas to be contagious *from her own private experience*, and she became nervous and excited. On the 18th she became *maniacal*, and she died on the 21st. I examined the body on the 22nd, and found, not peritonitis, but an enlarged ovary, about the size of a child's head at birth, behind the uterus, and occupying a considerable part of the pelvis. This enlarged ovary was, I believe, the cause of her labour being so much protracted as to necessitate embryotomy. Dr. Conquest saw her with me three times during the treatment, once at least during the time of labour, and once or twice afterwards. Neither he nor I detected the tumour during life.

Dr. WILTSHIRE asked Mr. Spencer Wells if he would kindly tell the Society how he would treat cases of solid or semi-solid ovarian tumour complicating pregnancy. Tapping, though useful enough in unilocular cysts, would in such cases be nearly useless.

Dr. BARNES thonght there was a practical rule. When the tumour obstructed labour, act upon the tumour so as to free the passage of the child; when this could not be done, then act upon the child.

Mr. SPENCER WELLS, in reply, said he did not see why an ovarian cyst should not be tapped during labour. If any con-

siderable quantity of fluid could be removed, great relief might be expected, and more vigorous action of the abdominal muscles. In the case of a multilocular cyst, as suggested by Dr. Wiltshire, probably one of the largest cysts might be emptied by tapping. If not, and the whole tumour was more or less solid, the case would be one calling for consultation with the most experienced accoucheur who could be obtained, as the question of instrumental delivery, the Cæsarian section, or ovariotomy, would have to be determined by the circumstances of the case.

ON PUERPERAL CONVULSIONS; ILLUSTRATED BY CASES.

By J. Hall Davis, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON; OBSTETRIC PHYSICIAN AND LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT THE MIDDLESEX HOSPITAL; PHYSICIAN TO THE ROYAL MATERNITY CHARITY.

Of the different kinds of convulsions which may attack a pregnant woman, I have selected for my contribution this evening the disease commonly termed puerperal convulsions, of which other synonyms are eclampsia parturientum, dystocia convulsiva, renal epilepsy, uræmic convulsions. Important as the consideration of this disease is to the obstetric practitioner, it has, I believe, not hitherto been brought before this Society.

It is a complication of pregnancy from which no rank of life is exempt, but, as regards the temperament and conformation of those attacked, it seems more commonly to appear among women presenting the combination of a nervous temperament with a more or less full habit of body. We know, moreover, that it occurs, as most records show, far more frequently in primiparæ than among multiparæ.

The cases which I have appended all presented the recognised characters of puerperal epilepsy or eclampsia, as distinguished more especially from hysteria on the one hand and from ordinary epilepsy on the other.

Now, although many of the cases were preceded by premonitory symptoms, not one of them, so far as I could ascertain, exhibited the "aura" which characteristically precedes the attack of ordinary epilepsy; and while the disease presented the clonic convulsions of epilepsy, with its loss of consciousness, its frothy saliva issuing from the mouth, blood tinged through laceration of the tongue by the teeth where not timely guarded, it manifested a considerable resemblance to apoplexy in regard to the ensuing coma, if we may so call it, and the beneficial influence of bloodletting, at least in many of the cases, a treatment we know to be very prejudicial in ordinary epilepsy.

The convulsions of puerperal eclampsia differ from those which sometimes appear in apoplexy in their greater violence and longer continuance; while in apoplexy they are slight, last only for a few moments, do not return, and are very commonly succeeded, if not quickly fatal, by paralysis, an event which only very exceptionally follows upon puerperal convulsions.

I need not occupy your time with a detail of the symptoms constituting a paroxysm of the disease—first, those belonging to the true convulsive stage; secondly, those of the subsequent stage of apoplectic stupor. They appeared in the cases subjoined much as they are described in our best systematic works.

Occasionally, as a rare and accidental complication, apoplexy occurs, and the patient may die in the comatose state, and then at the post-mortem inquiry an effusion of blood may be discovered upon the brain, in the centre of the hemispheres, in the ventricles, upon the base of the cerebellum, or contiguously to the medulla oblongata. Such a result, however, will be rare if, in plethoric subjects, the safety of the nervous centres shall be timely guarded by depletion. Should the patient survive an apoplectic attack in this disease, she may yet be left partially or wholly paralysed.

In other instances of eclampsia mania has supervened, not commonly, however, of long duration, and usually

recovered from under judicious treatment. An example of this sequence appears in my report.

There is yet another sequence predisposed to by the morbid condition of blood arising from renal disease. I allude to inflammation of a serous membrane, of which peritonitis, as we might have expected, is the more frequent instance. Of this I give an example.

Antecedents and premonitory signs of the disease.—Among the *premonitory* signs which had preceded the attacks or threatened their invasion—and several of the cases had presented these signs—there were present in some of them certain combined symptoms, which have now, for several years, since, in 1843, attention was first seriously drawn to their importance by Dr. Lever, attracted considerable notice from the profession. I allude to dropsical effusions, especially in the form of œdema of the face and upper extremities, associated with albuminuria and deficient urea in the urine, accompanied, in some instances, by the presence of cylindrical blood-clots, casts of the uriniferous tubes, with fatty epithelium—symptoms, in short, similar to those observed in Bright's disease of the kidney.

It is true that Hamilton, 1800, and Demanet, 1801-2, had previously recorded the fact that puerperal convulsions were often preceded by anasarca, the latter observer considering it one of the essential causes, but Lever, as we see, made a further advance in explaining the pathology of the disease as regarded many of the cases.

Where the urea is found to be very deficient in the urine, chemists have discovered its presence abundantly in the blood, and it is inferred that the blood so charged with urea acts as an irritant upon the nervous centres, as also upon the afferent nerves of the reflex function, rendering them more sensitive to impressions. Thus, the convulsions are excited, which are here, therefore, called *uræmic convulsions.*

Some physiologists, however, as Frerichs and Lehman, maintain that it is not the urea, as such, circulating in the blood which excites the disease, but carbonate of ammonia,

into which, by a process of fermentation, the urea becomes transformed, and may be detected in the breath and sweat as well as in the blood. Here I may incidentally notice the conjecture that the beneficial action of chloroform in many cases of these convulsions is due, not only to its anæsthetic effect, but also to its having the property of preventing that transformation. The explanation given is that, as chloroform, when fully administered, is known to produce a transitory presence of sugar in the urine, and as sugar is known to prevent the ordinary change of urea into carbonate of ammonia, so it is reasonably inferred that its presence also in the blood of the chloroformed patient serves to guard her from a repetition of these convulsions.

While attributing due importance to the combined symptoms albuminuria and dropsical effusions, as justifying the apprehension of an eclamptic attack, and taking timely prophylactic measures against the threatened disease, yet it must be admitted that exceptions to the sequence of convulsions upon these symptoms are not very rare. In most of these, however, which came under my observation, and one quite recently has occurred in my ward at the Middlesex Hospital, the dropsy was very extensive, and it has been suggested, when such is the case, that a proportional quantity of urea is contained in the effused serum, and so, the blood getting rid of a part of its poison, uræmic intoxication is thus averted.

It has been a question, whence in a pregnant woman, who may not hitherto have exhibited renal derangement, arises the condition of the kidney which induces albuminuria, defective urea, &c., with uræmia? And the reply given by Dr. Rose Cormack and his followers is that the condition is one of renal congestion, due to the weight and pressure of the gravid uterus upon the kidneys and their venous circulation, interfering with the free return of the venous blood from these organs. We see that it is in the latter part of pregnancy, when such weight and pressure would be most operative, that these convulsions do occur, and the effect might be expected to be increased by

the circumstance that a larger quantity of blood, and that richer in its quality, is circulating in the patient's system at an advanced period of pregnancy. Then, in regard to the pressure exerted on the kidney, we know that an unimpaired tonicity of the abdominal walls would cause greater pressure in primiparæ, who constitute about two thirds of the cases of eclampsia.

In support of the belief that pressure on the renal circulation, and not renal derangement independent of that pressure, is the cause of the morbid urine, œdema and uræmia, we find that, with rare exceptions, the signs of renal disorder afforded by albuminuria, in cases of eclampsia, entirely disappear in the course of a few days, at any rate within the month from delivery. The exceptions usually being those of the cases of worn multiparæ, in whom there existed renal disease previously to the pregnancy.

For the fullest information on uræmia as a cause of puerperal eclampsia, we are much indebted to the excellent monograph of Professor Carl Braun, of Vienna, more extensively made known to the profession in this country through the able translation of Dr. Matthews Duncan.

We are well aware that various other poisons circulating in the blood, introduced into it in different ways, as in the case of some of our febrile exanthematous diseases at their onset, and that certain other poisonous matters, either derived from without or generated by morbid changes going on in the body, may, by their irritation of the nervous centres, give rise to epileptiform convulsions. I give an instance where it arose from a septic poison introduced into the blood by absorption of putrescent matters from the uterus, and other similar examples may be found recorded.

Bile circulating in the blood would seem also to be capable, by its irritating effect on the medulla oblongata and spinal marrow, and so acting centrically on the nervous system, of exciting these convulsions, then termed *cholæmic*.

A not uncommon centric cause of puerperal convulsions is a state of active congestion of the brain and spinal

marrow connected with a plethoric condition of the patient's circulation; hence arise those cases, in which bloodletting proves so beneficial a remedy.

Mental emotions of various kinds, to which some women indeed are more predisposed than others, are also common causes of convulsions of centric origin, a temporary local congestion of the hemispheres being the first result of the emotional movement, whence pressure comes to be exerted on the medulla oblongata and spinal marrow, and thence an abnormal nerve force is radiated outwards by the efferent or motor nerves to the muscles of the body. Other causes of centric origin might be instanced.

But let us next consider various causes of irritation of eccentric origin, in other words, those which act on the periphery of afferent or excitor nerves leading from different organs of the body to the spinal marrow and medulla oblongata.

We may instance the cases of irritants applied to afferent or excitor nerves of the stomach, the intestines, small and large, the kidneys, the bladder, the liver, the uterus, the ovaries, the vagina, the perineum, or the mamma, the stimulus being conveyed therefrom to the nervous centres, whence the required motor nerve force is reflected to the convulsed muscles by the centrifugal or efferent nerves.

Without doubt the various causes which I have detailed are more likely to be effective in the production of convulsions in the more impressible nervous system of uræmic patients, and that of highly nervous temperaments. For the same reason, as most records show, they appear in a conderable proportion among primiparous women, more especially among unmarried primiparæ, owing, most probably, to the distressed state of mind incidental to their unhappy position.

Another influential agency in the causation of convulsions has been alleged by M. Andral, M. Dugès; also by Smellie, Denman, Ramsbotham, Simpson, and others, who believe that they have observed a greater prevalence of convulsions during hot weather, and in highly electrical states of the

atmospl.ere. Although my cases do not suffice to prove this, I think we may conclude, from what we see in other subjects, of the influence of such a condition of atmosphere upon the cerebral hemispheres, and other parts of the nervous system, that the above belief is not improbably a true one. At all events, it deserves to be borne in mind in the records of future cases. The majority of my cases occurred in the months of June, July, August, and September, but except in one case where the weather was intensely hot, the state of the atmosphere at the time is not noted.

That these convulsions are essentially dependent, for the predisponency to them, on some special nervous influence communicated to the cerebro-spinal centres by the nerve filaments of the genital organs, in pregnancy and in the puerperal state, seems quite evident.

But as regards the connection between eclampsia and the pains of labour, although in some cases the early pains would seem to initiate the convulsions, experience has shown that the presence of labour is not essential to their production, since a certain proportion of cases distinctly precede labour, while another proportion do not supervene till after the function of parturition is fully completed; sometimes, indeed, not till many hours have elapsed.

As respects the influence of the convulsions in exciting labour, it will be found that in the following cases, where the convulsions preceded labour, the process of parturition was induced by them excepting in three instances where, for the safety of the patient, I had purposely to induce it.

Rare exceptions I know have occurred, where, after treatment, the convulsions have been known to cease entirely, and the patients have gone on in their pregnancy without further complication. Morel and Gustavus Braun each met with an example; and some of our countrymen have met with others.

The convulsions once induced, fresh paroxysms often coincide with, and appear to be induced by the pains.

As to the kind of labour in cases of convulsions, it does not appear that obstructive difficulties occasioned by the

hard or soft parts of mother or child were frequently met with; and when they did occur, they could scarcely be held to have had any influence in originating the disease, although calculated to keep up the disease when once commenced.

The *prognosis* should be guarded in all cases of puerperal convulsions, for it is a highly dangerous disease. If the patient lies long in a state of complete stupor, with stertorous breathing after the paroxysm, even although the fits might be of short duration, we should consider her in greater danger than if the convulsions were stronger, with a return to perfect consciousness between the fits. As a rule, those which occur before or during labour are more dangerous than those which follow labour.

Under our present improved treatment the danger, although great in puerperal eclampsia, is scarcely in proportion to the frightfulness of the patient's appearance, and to the terror and dismay produced on the minds of relatives and friends, which is so strongly in contrast with the calm and delusive security oftentimes observed among the attendants upon a case of equally, if not more dangerous flooding.

In comparing the results of treatment in former days with that of the present time, we find that whereas formerly six or seven out of ten patients in these convulsions died; in more recent times the mortality is very much less. The latest authentic report of the mortality from puerperal convulsions does not, upon the most unfavorable view, exceed 1 in 5 cases, as given by Drs. Johnston and Sinclair, from the Dublin Lying-in Hospital, 1847—1854; but it must be remembered that of the 63 cases of convulsions which their report contains, 44 occurred in unmarried primiparæ, in whom the mortality from convulsions, as from all puerperal diseases, is, for reasons already stated, much larger.

In the Royal Maternity Charity of London, in which the patients are married women, and the deliveries conducted at their own homes, the eastern district, as reported by Dr. Ramsbotham, 1820—1850, yielded 43 cases of convulsions,

and gave a mortality of only 1 in 14·3; while in mine, the western district, the deaths from convulsions were 1 in 11. Much as the mortality has been diminished from what it was in the days of Lowder and Hunter, I believe that it will be still further reduced, as that valuable agent chloroform comes more to be employed in suitable cases for its administration, and other indications are fully recognised.

The prognosis for the child is unfavorable in a large proportion of the cases—it is computed in more than half. This is partly due to the continuous and violent contractions of the uterus upon the body of the child; partly to the poisonous effect of the mother's blood upon her child, whose blood on analysis is found impregnated with urea. Hence, the child, although born alive and promising to survive, may yet die some hours after in uræmic convulsions. I believe that a proper watchfulness to seize the earliest fitting opportunity for delivery by forceps or turning under chloroform will tend to lessen the mortality among the children.

Repetition of convulsions in after pregnancies.—As a rule, the disease is not repeated in a subsequent pregnancy. As far as I could trace, the convulsions in the primiparous patients did not recur in the subsequent pregnancies, and in the multiparæ they had not previously occurred; but examples of such repetition do occur. Dewees records its occurrence in a patient in her first, third, and fifth labours. Baudelocque, Capuron, Perfect, and Portal also give cases of its recurrence in subsequent labours of the same patient; and doubtless such repetitions have been witnessed by Fellows of this Society.

The treatment of puerperal convulsions.—This is resolvable into the *preventive* and *curative;* and under both these heads it must be regulated by the *sthenic* and *asthenic* state of the patients, as well as by other circumstances having reference to the cause and aggravation of the disease by certain conditions in each case.

The *preventive treatment* in a patient presenting premonitory symptoms will be as follows:

In the *sthenic* condition of the patient bleeding from the

arm; local treatment of lumbar pains by cupping, or leeching, sinapism; relief of the bowels by brisk aperients, a restricted, unstimulating diet; exercise, and amount of sleep duly regulated, and other points to be attended to in regard to the patient's health. Thus, we lessen the plethoric state of our patient, and with it the congestion of the nervous centres. In some cases free purgation and regulation of diet and exercise will suffice to ward off the threatened disease.

In an *asthenic* condition, gentle relief of the bowels, nutritious diet, mild tonics, and counter-irritation to the nape of the neck for head symptoms, in some cases will be suitable treatment. Should there be present albuminuria and œdema, we should apply dry cupping with linseed and mustard poultices to the renal region, while we promote the action of the skin by warm clothing and diaphoretic medicines.

The curative treatment of the actual convulsions.—Our first duty is, of course, to secure the tongue from injury by the teeth by interposing between the molars some suitable substance, such as a piece of firewood enveloped in the corner of a handkerchief, or a cork; and also at once to remove capstrings, stays, &c., as calculated further to embarrass the circulation and respiration. The room should be kept cool and well ventilated, overcrowding prevented. The patient's movements should not be restrained beyond preventing her from throwing herself off the bed, and from bruising her person.

Our second duty is to treat the disease promptly, according to its type, and other circumstances attending it.

In the *sthenic* form, as among robust plethoric subjects, we must resort to free bloodletting. Generally one full bleeding will suffice; rarely, when required to be repeated, is more than a second smaller bleeding called for. I will say nothing of the amount of blood which it may be necessary to take; that must be relative to the patient's constitution and the severity of the disease. When Denman, Gooch, and others, resorted to the practice of free bloodletting, the mortality from puerperal convulsions was much

diminished from what it had been in the time of Smellie, William Hunter, and Lowder, when more than half the patients died. We must, however, when bleeding is absolutely indicated, guard ourselves against carrying it beyond what the case requires; but, on the other hand, we should not allow an ill-timed timidity to prevent our adopting it, or taking away what may be necessary to secure our patient's brain and spinal marrow from serious injury.

A brisk purgative, as calomel and jalap, or scammony, should be given as soon as the patient can swallow. Calomel, with a drop or two of croton-oil, is sometimes preferable, as being more easily placed on the back of the tongue and swallowed, as also less likely to be rejected by vomiting. Repeated doses of infusion of senna, sulphate of magnesia with jalap, may be given in other cases at intervals.

A strong purgative enema of soap-and-water, with turpentine, sometimes assafœtida and aloes, should be given as soon as possible. The bladder should also be looked to and relieved, if necessary. Cold should be applied to the head; cold water may usefully be poured over the head held over a basin at the side of the bed. Dashing cold water in the face, or flapping the face with the corner of a wet napkin, or with a bunch of wet feathers, as adopted by Denman, has been found beneficial in arresting a paroxysm. The illustrious Harvey records a case where stimulating the sensory nerves within the nostril arrested the disease. A full inspiratory movement is thus excited, during which the glottis, previously closed, is thrown open, and air at once rushes into the lungs; thus, the desired relief to the respiration and circulation is afforded. After this, if necessary, sinapisms or acetum cantharidis should be applied to the nape of the neck, or even to the shaved head. It has also been found useful to apply sinapisms to the feet and calves of the legs.

As an adjuvant to bloodletting, and sometimes as a substitute for it, tartar emetic has been found beneficial as a sedative. After full bloodletting and purging, opium has sometimes been usefully had recourse to; but since the introduction of ether and chloroform, these agents are much

preferred, and are now frequently given in aid of bloodletting as a sedative; and the reports of cases so treated in Europe and America have been highly satisfactory.

In *asthenic* cases of eclampsia bloodletting is contra-indicated as injurious. In these cases, whether attended or not by signs of renal disease, the inhalation of chloroform should be immediately resorted to as the principal remedy; the bowels should be relieved by a purgative enema, and the bladder by the catheter, if required. If chloroform should be contra-indicated by any peculiarity of the patient, an adequate dose of opium after full relief of the bowels, must be substituted for it. In a recent case bromide of potassium was very effective.

In the treatment of convulsions emetics have sometimes been recommended; but I would not advise their administration, except to remove a source of gastric irritation where we know that the patient has, just before, taken a full meal; then one brisk emetic of sulphate of zinc, common salt, or mustard, given immediately, and followed by a draught of warm water, would be useful. In one primipara I believe I prevented a threatened attack of convulsions by that treatment.

Treatment of the labour.—The labour, should it have supervened, must next become an object of our attention. In all cases of convulsions, even where we may have no evidence that labour has commenced, a vaginal examination should most certainly be made, for sometimes labour has been unexpectedly found near its completion, when the inquiry has first been instituted; nay, the child, quite unexpectedly, has sometimes been discovered lying dead outside the vulva, when it was supposed that labour had not yet commenced.

In many cases the labour requires no interference, either manually or instrumentally, especially in the first stage, which is frequently over before our arrival. Should, however, the os uteri be but partially dilated, we shall find, in bloodletting, for some cases, especially followed by chloroform, or in chloroform only, sometimes in tartar emetic, a

more satisfactory mode of obtaining relaxation and full dilatation of that aperture than in any mechanical means. Besides such means cannot be had recourse to without almost a certainty of re-exciting a convulsive paroxysm. Dr. Denman informs us that he had, on one occasion, re-excited a convulsive paroxysm in his endeavour to dilate the os uteri by the use of his fingers, and therefore he warned his pupils against the practice.

If labour is not present, and our remedial treatment is successful, it may sometimes happen that the patient may thenceforward pass on to her full term without any repetition of the convulsions. But, should the convulsions continue, we must then take steps to induce and complete labour as soon as possible. If we have reason to believe that the liquor amnii is greatly in excess, labour will then best be induced by discharge of that fluid by the stilet or anything, as the point of a pen, which will fulfil that purpose. Otherwise, rupture of the membranes should, I think, be avoided as a first measure, as being calculated to interfere with the easy progress of the labour, and certainly to render turning more difficult, should it become necessary. If we decide to maintain the entirety of the amnion and its contained waters, parturition should then be induced, and furthered by the use of Barnes' india-rubber dilators. One of these should be passed up empty, carefully within the uterine orifice, outside the membranes, and injected with water, a larger size being substituted as the case proceeds. To avoid irritation, this should be accomplished under chloroform. The dilator having done its work, it is removed, and the amniotic bag of waters remains to dilate the vagina. If, on the contrary, we have to discharge the liquor amnii at the onset, the artificial dilator, above described, will then come in usefully as a substitute to bring about the necessary dilatation, first of the uterine orifice, secondly of the vaginal passage for the more easy transit of the child. We will suppose, however, that labour has already commenced when we reach the case; that the child presents by the head, the os uteri is fully, or all but fully, dilated and

relaxed, the waters discharged; what are we to do here if the convulsions continue? we should then, under chloroform, complete the labour by turning, or by the long forceps, as may appear to us to be preferable or prove to be practicable. Craniotomy must only be had recourse to when other attempts to deliver fail, in consequence of deficient pelvic space relative or absolute, and never on account of the convulsions *per se*.

If the head has descended more or less into the pelvic cavity, delivery by the forceps will be the indication, and craniotomy must only be resorted to when a small pelvis, or the large size of the child's head, render it unavoidable.

Breech presentations are to be advanced by manual aid in the usual way, if the continuance of the convulsions should render that interference necessary. So, also, *footling* cases are to be hurried on for the same reason; but in both presentations chloroform will be found an useful aid in relaxing the tissues, as well as being the remedy for the eclampsia.

Cross births must be treated, as in complicated cases, by turning under anæsthesia, or by embryotomy, if inevitable.

If *twin labours* complicated by convulsions should require interference, which is by no means always the case, they must be completed more expeditiously than we should think necessary in the absence of complication, by the forceps, or by version in head presentations; by version, of course, and without any delay in transverse presentations; and by simple traction in breech and feet presentations.

The *placental stage* of labour, if needing our assistance, should be aided while the patient is under chloroform, as a fatal paroxysm has been known to be excited by the passage of the hand to remove a retained placenta. I give a case, Ingleby also gives one, and Ramsbotham others.

Convulsions occurring some weeks before labour must be treated medically on the same principles as those occurring in the labour itself, but less actively in the sthenic form, as the great vascular excitement produced by labour is not now present. Purgatives and mild diuretics, with the removal of any discovered cause of irritation, will be proper,

after which the patient may sometimes satisfactorily proceed to full term.

Convulsions after delivery do not require the same active treatment as those occurring before or during labour. Medicines to promote free action of the bowels and kidneys, cold to the head, sinapisms to the calves, will usually suffice. The use of chloroform will sometimes be indicated. Yet, in some cases, where there has scarcely been the usual loss of blood in the placental stage of labour, it may be necessary, in plethoric subjects, to resort to a small blood-letting. In one of my cases I was about on the return of convulsions with a hard pulse, after delivery, to take blood from the arm of a robust young primipara, when a seasonable flooding set in, and completed the cure, after which she made a good recovery.

The post-mortem appearances, unless the case is one complicated by apoplexy, are usually very slight, at the most a turgid state of the cerebral vessels and venous sinuses, with some serous effusion. But, in cases where apoplexy has also been present, effusion of blood in different situations within the cranium with more or less effusion of serum have been found, as I have already detailed.

The following report of cases illustrates most of the phenomena and antecedents of the disease, and also the points in the treatment upon which I have dwelt in the above introductory remarks.

Case 1.—June 15th, 1842, 2 p.m.—I was called by a professional friend to a lady, æt. 20, seven months advanced in her *first* pregnancy; of middle stature, delicate conformation; married nine months.

At seven that morning she had risen suddenly from bed, walked to a distant part of the room, complaining of severe pain in her head, and in a few seconds after she was seized with puerperal convulsions. She was forthwith removed to her bed, and her attendant sent for, who came immediately. Having guarded the tongue, he bled his patient to twelve ounces. At mid-day twelve ounces more blood were taken

by cupping, and fifty drops of laudanum given. At my visit at 2 p.m. the lady had had twelve fits of great violence, without intervening consciousness. The body strongly arched forwards during each fit. I found the pulse hard and full. I suggested more bleeding, and eighteen ounces were quickly withdrawn from behind the ears by an expert cupper. The patient then fainted. A full dose of morphia, with calomel five grains, croton oil one drop, was then put upon the back of the tongue.

At 6 p.m., as the bowels had not acted, another drop of croton oil was given with success. The convulsions had not returned, but she was still unconscious, and remained so for two days after delivery, with slight returns of the convulsions. The birth was spontaneous same night, head presentation, child still-born. The mother did well, her recovery of strength being completed at the sea-side. whence she returned in perfect health on the 5th of August.

Remarks.—This patient was not a plethoric subject; she therefore did not require the large bloodlettings often practised in such subjects. Probably, had the first bleeding been carried to twenty ounces instead of, as it was, to twelve ounces, less than the quantity taken would have sufficed. I would also remark that the first opiate was premature. The second opiate, after the loss of thirty ounces of blood at the two bleedings, had the intended effect of quieting the nervous system without any injurious result.

In the present day the above case would have been treated, for the most part at least, by chloroform, and I believe beneficially.

CASE 2.—*A distended gall-bladder apparently the excitor of the convulsions.*—In the summer, about the year 1839, I was called to a patient, æt. 40, of full habit. She had had one child, and several miscarriages due to syphilitic taint. She had just before given birth to a full term child, living, without placental complication. She had complained of headache and pain in right hypochondrium. I found

her in convulsions. She had a strong full pulse, and was immediately bled to about twenty-four ounces, which, judging from the improved pulse, appeared sufficient. Opium was subsequently given. The bowels had already been fully moved by aperients. The disease was for the time arrested, but a relapse took place the same day, and she died convulsed in the next paroxysm.

Examination of the body detected no apparent explanation of the convulsions anywhere except in the hepatic region, where the gall-bladder was discovered greatly distended with biliary calculi; and this I inferred was an important exciter of the convulsions.

Case 3.—*Puerperal convulsions seemingly threatened, and apparently prevented by prophylactic treatment.*—E. E—, æt. 23, entered upon her first labour July 21, 1844, at 9 a.m. The pains continued throughout the day until 11 at night, when they ceased, and drowsiness set in with pyrexia; the skin hot and dry; pulse hard, full, 75; severe frontal headache. Shortly before midnight her medical attendant bled her from the arm by a free orifice to twenty-eight ounces. Upon this the skin became moist; the headache ceased; but the drowsiness continued.

At 2 a.m. I was consulted, and found a head presentation; pains weak; os uteri of size of a crown piece; the patient drowsy; pulse strong and full.

As there appeared still to be grounds for expecting an attack of convulsions, I suggested further abstraction of blood; accordingly twelve more ounces were rapidly taken. After this the drowsiness was almost removed, the pains became more forcing, the head gradually advancing, and a living child was born at seven the same morning. The placenta was thrown off naturally into the vagina, and thence removed.

My friend informed me that the patient afterwards had no recollection of my visit, nor of having been bled even the second time: although after it she answered my questions correctly. She made a good recovery.

Case 4.—*Manual irritation of uterus in placental stage apparently the excitor of the disease.*—Not long after the occurrence of the last case, and in extremely hot weather I well remember, I was called to a case of retained placenta, which was adherent. The patient, a multipara, was a woman, aged about forty, of full habit, with congested features. She had suffered no loss of blood. Her labour had been protracted, but had ended, without instrumental aid, in a living birth. I had just got my hand gradually into the uterine cavity, and was about to commence the detachment of the adherent placenta, when the patient was suddenly seized with convulsions and immediately expired.

This case may be classed with a few other fatal events of the same kind, those of Ingleby and Ramsbotham for examples, as immediately caused by the local irritation of the internal surface of the uterus in a highly sensitive condition. There was probably a predisposing element in the case, which I had no reliable means afforded me of ascertaining from any previous history, or from any subsequent *post-mortem* inquiry, as this we were unable to make. These were not the days of chloroform; but we may conjecture that if chloroform had been then discovered, and exhibited before passing the hand into the vagina, the fatal convulsion might possibly have been averted. But I think it also highly probable, especially when I consider the extreme heat of the weather at the time, that a previous blood-letting in the labour would have been beneficial in reducing plethora, shortening labour, and preventing the tendency to convulsions.

Case 5.—*Puerperal convulsions excited by gastric irritation.*—December 30th, 1844, I was called by a medical friend to a patient, æt. 35, who had the evening before been delivered of her *fifth* child living. On the morning of my visit she was seized with violent eclamptic convulsions.

On the eve of her labour she had eaten a large meal of goose; this had been followed by vomiting.

Treatment and progress.—Before I saw her she had been

bled from the arm to thirty-five ounces; twelve leeches then applied had bled freely, but the convulsions were unchecked.

I found the pulse as yet firm in its beat; the bowels had not been relieved. I ordered twelve more leeches to the head, ice to the shaved head, a purgative of calomel six grains, croton oil and oil of cassia of each one drop.

These measures had the desired effect. After the second application of leeches, with free purging, the convulsions did not return, and the patient subsequently made a good recovery. A timely emetic the evening before would probably have averted the attack by removing the indigesta, the cause of the convulsions.

Case 6.—*The attack followed a violent mental emotion. An artificial bleeding, followed by a post-partum uterine hæmorrhage, constituted the chief cure.*—March 25th, 1846, 1 p.m., I was called to a patient of the Royal Maternity Charity in labour of her *first* child, æt. 22, habit robust. She had just had a violent paroxysm of puerperal convulsions. I found her comatose, with stertorous breathing, dilated pupils, slow, compressed pulse, lips and cheeks livid, skin cool.

Previous history.—The patient had lost her mother suddenly a few days previously, and immediately after a violent quarrel; they had long been on bad terms. Her mother's death in such circumstances had preyed much upon her mind. Labour pains had commenced at eight the previous evening; the waters of the ovum had come away at eight this morning; the presenting head had then, by 1 o'clock, gradually descended nearly to pelvic outlet.

Treatment.—I bled her from the arm in a full stream to thirty ounces; she then immediately recovered consciousness, and had labour pains at short intervals. The contents of the bladder—four ounces only—were removed by the catheter; a strong purgative enema was exhibited. I expected that the patient would soon now be delivered by the natural efforts; the *os uteri* was not yet nearly dilated

enough for delivery. I therefore left, but giving instructions to be sent for if necessary.

At 4 p.m. I was again summoned, as she had had another attack, and was now comatose. The os uteri being now sufficiently dilated I applied the forceps; but a fair trial of them yielding no advance of the head, I delivered by craniotomy a male child of full size. The uterus immediately afterwards contracted well, but did not throw off the placenta. Ten minutes later the patient was again attacked by convulsions, during which the placenta was expelled. When these had passed off the symptoms left were stupor, slow, full pulse, dilated pupils; uterus contracted. I was preparing to take more blood when a well-timed flooding set in profusely; probably between one and two pints in the course of a few seconds. Upon this the patient recovered her consciousness, and had no return of her disease. She, however, became restless; an opiate seeming now fairly indicated, I exhibited a drachm of laudanum, having first had an enema administered which brought away some feculent matters. This was followed by five grains of calomel, with a drop of croton oil, which acted freely. No further treatment was required, and the patient made a rapid and perfect recovery.

Remarks.—In this case the first bleeding, an artificial one, although carried to thirty ounces rapidly taken, did not suffice; but, supplemented by the subsequent flooding from the uterus, the desired result was obtained. The purgative, which should have been previously administered, also did good service. Nervous restlessness supervening after ample loss of blood, opium was indicated, and its exhibition was followed by several hours of refreshing sleep.

Case 7.—*The convulsions treated by bloodletting, purgatives, and opium.*—August 4th, 1847, 3 p.m. I visited a young primipara, a patient of the Royal Maternity Charity, the subject of puerperal convulsions. The head had descended low into the pelvis, the *os uteri* was only half dilated; skin hot and dry. She was not apparently a

strong subject, yet bleeding to some extent, it seemed to me, might be tolerated with advantage.

I bled her to sixteen ounces, and administered a purgative, which acted freely. A drachm of tincture of opium was then administered. Good uterine action followed, milder convulsions returning from time to time. A living child was born without instrumental aid at 10.30 p.m. This patient made a good recovery.

In the latter part of the same year I think I should have given chloroform without depletion in this case.

Case 8.—*Puerperal convulsions in a hemiplegic patient, after embryotomy delivery under arm presentation.*—August 5th, 1847. A patient, aged about 30, badly nourished during pregnancy, and who had become hemiplegic as gestation advanced, was brought under my notice by Mr. George, of Camden Town. It was not her first child. The liquor amnii had escaped the day before. I found an arm presentation, and so wedged in the brim of the pelvis that I was obliged to deliver by embryotomy; and in doing so I found decapitation necessary. Immediately after the birth puerperal convulsions followed, for which, as the patient was asthenic, I did not resort to bloodletting, but at once exhibited opium, a drachm of the tincture.

At the end of an hour, she being fully under the influence of the opium and the convulsions subdued, the case being, therefore, better prepared for manual interference, I removed the placenta, which was not adherent. The convulsions did not return. No disorder of the pelvic organs followed, and for two days the patient promised well. Good nourishment was given, and sustaining treatment adopted from the first; but, notwithstanding, she gradually sank from exhaustion, and died on the sixth day. Unfortunately, no post-mortem examination was permitted.

Chloroform would, I believe, have been preferable to opium in this case, and might have been given prophylactically to prevent convulsions; but at that time chloroform

had only just been introduced, and its action had yet to be fully tested.

CASE 9.—*Chloroform given to a hemiplegic patient as a prophylactic against convulsions.*—About the year 1867 I had the opportunity of proving the efficacy of chloroform in a primipara of about thirty years of age, whose pregnancy was complicated by hemiplegia, and who had on that account been placed under my especial care. It occurred to me, upon the experience of the previous case of hemiplegia, that the action of labour might expose this patient to another effusion of blood on the nervous centres, and possibly to convulsions; so, to keep that action within bounds, hasten relaxation of the genital tube, and thus lessen resistance, I placed her under chloroform. The objects sought for were obtained; the child was born living after a short labour, without the need for instrumental aid, and the mother made a fair recovery, considering her paralytic condition.

CASE 10.—A primipara, æt. 18, was, after a hard labour of twenty hours' duration, delivered of a living child on January 14th, 1850, at 4.45 a.m. At 9 a.m. she was seized with convulsions, which had been preceded by violent sickness and frontal headache.

State at my visit, on the evening of the following day,—Stertorous breathing; pupils dilated, non-contractile to strong light; pulse 100, firm; lips livid; extremities warm. She had then had twelve paroxysms of puerperal convulsions, but as yet no active treatment had been resorted to.

The treatment suggested consisted of bleeding from the arm, which was carried to forty ounces by a large orifice; the blood flowed with force to that amount without the occurrence of fainting. But considering that that quantity, with the improved quality of the pulse obtained, would suffice, the vein was now closed. Calomel, six grains, and croton oil, two drops, were given; also a turpentine enema

was administered. . The back hair was cut away, and a cold lotion applied to the occipital region.

January 16th, 11.30 a.m.—Patient has been so far sensible as once or twice to ask for water to quench her thirst, and when loudly asked to put out her tongue, she had done so. Tongue dry, and brown in centre. Bowels have acted once, not copiously. I ordered a draught of sulphate of magnesia, senna with tincture of jalap, and a blister to be applied to nape of neck.

17th. — The bowels have acted twice, copiously; the blister vesicated well. Some stupor remains; tongue moist and cleaning. In the evening consciousness fully restored, spirits good. Aperient draught to be repeated to-morrow morning.

18th.—Free action of the bowels has taken place. From this time she went on well, and the case may be considered to have been very satisfactory in its result, seeing that two days of important time had passed, ere effective treatment was resorted to. Might not a timely relief, by forceps delivery and the use of chloroform combined, have gone far to prevent the convulsive attack, or at all events towards diminishing its severity?

Case 11.—*Convulsions in labour, a tough amnion retarding delivery, bloodletting, purgatives, blister to nape, good recovery.*—March 15th, 1855, 11 p.m, I was called by Mr. J. Templeton Kirkwood to a primipara, æt. 25, seven and a half months advanced in pregnancy. She had been attacked by eclampsia at seven in the morning. Twenty-four leeches to temples had bled freely; four grains of calomel had fully opened the bowels.

I found patient unconscious. Although writhing with labour-pains, no convulsive movements were present. Pupils dilated; breathing stertorous. The amnion, distended with waters, presented at vaginal outlet.

Treatment. — The bag of waters evidently retarding delivery, being a cause of irritation, was now ruptured by the finger, and the child was immediately after expelled,

livid and dead; the placenta followed shortly. As consciousness had not returned, a blister to be applied to nape of neck.

March 17th.—The blister had vesicated well, and consciousness had returned this morning. Good recovery followed in the usual time.

CASE 12.—*Convulsions in a primipara during and after delivery; bloodletting, purging; delivery by forceps.*—September 29th, 1855.—M. S—, æt. 19, a patient of the Royal Maternity Charity, in her first pregnancy, near full term, attacked by convulsions at 1 p.m., was bled from the arm at 3 p.m., and a purgative enema exhibited. At 9 p.m., the convulsions recurring, she was again bled, her habit of body fully authorising a repetition of the bleeding. The convulsions now subsided. Labour did not set in till two the following morning, and she was delivered by the forceps when the os uteri was sufficiently dilated, the child still-born. Convulsions recurred after delivery, and continued for two days, during which time the bowels were purged, the head was shaved and cooled, and subsequently a blister was applied to nape of neck. Entire consciousness did not, however, return till the eighth day from delivery. She then recovered, and she has since, as a patient of the above charity, been thrice delivered of living children without complication.

CASE 13.—*In a primipara, breech presentation; the convulsions treated by bloodletting, purging, &c.*—September 30th, 1855, at 4 a.m., I was called by Mr. Harris, of Gower Street, to a patient, æt. 40, in her *first* labour, after a marriage of fourteen years. The "waters" had come away a few hours previously, and the breech offering, had partly descended into cavity of pelvis. Pain of head, extending down spine of neck, had troubled her since yesterday morning. My friend had, on account of violent convulsions setting in, bled his patient to eighteen ounces, and applied a sinapism to nape of neck. The bladder and bowels had been duly

relieved; cold had been applied to the head. The convulsions had been subdued. Having given my opinion, I was about to leave, when, my friend requesting my presence till the end of the labour, I remained. After the breech had advanced through the outlet, the arms were lowered, then the head. The funis had ceased to beat before the child's birth. Attempts at resuscitation were made without success. Placenta came away easily. The patient made a good recovery without any further check.

Case 14.—*A second pregnancy; convulsions before labour; purging, bloodletting, sinapism to nape.*—December 7th, 1855.—The patient, æt. 30, in last month of second pregnancy, not yet in labour, the os uteri not open. Her first labour, natural, occurred a year ago, child living.

She had been attacked two days before my visit by puerperal convulsions. The treatment had consisted of purging and application of sinapism to the cervical spine.

I found her in a stupor; pulse oppressed and slow. I prescribed venesection, but the supply of blood from right arm being scanty, a vein was then incised in the left arm. In all forty ounces of blood were withdrawn without pallor or faintness being produced; the pulse, however, became fuller and quicker, the stupor passed off, and the convulsions did not recur. In a few hours labour set in, and the patient was safely delivered by the natural efforts of a dead child. She subsequently did well.

Case 15.—*The convulsions followed a third labour; child born naturally and living; bleeding, purging, and cold to head.*—February 8th, 1857, I saw a young married woman who had been confined the day before, without difficulty, of her *third* child, born living, by a head presentation. I found her with contracted pupils, pulse quick and hard, violent convulsive movements of muscles of face and limbs, livid features, foaming at the mouth. The convulsions subsiding, the pulse now became slow, the pupils dilated,

breathing stertorous, till the next paroxysm. The fits returned frequently, without intervening consciousness.

Treatment and progress.—The tongue was at once guarded. Sixteen ounces of blood were taken quickly from the arm; calomel, five grains, croton oil, one drop, placed on back of tongue; an enema of turpentine and aloes was administered. A hot fire in the room I ordered to be put out. The back hair was cut close, the head ordered to be kept cool with cold lotions.

February 9th.—Convulsions continue. An opiate has been wrongly given, the bowels not having been first sufficiently relieved. Ordered a blister to nape of neck; croton oil, one drop, mixed with sugar, to be placed on the tongue; an assafœtida enema administered.

10th.—Free relief of the bowels has taken place; the convulsions ceased at two this morning. The patient was conscious, and now promised to do well; her recovery, however, was retarded by an attack of bronchitis, which received its appropriate treatment with a good result.

Case 16.—*The convulsions preceded by œdema, albuminuria, &c., treated by chloroform, after due relief of the bowels.*—December 8th, 1860, 7.30 p.m.—A retired army surgeon called me to his wife, aged about 28, advanced to seven and a half months of her third pregnancy. She had been seized with puerperal convulsions at 1.30 p.m. For three or four days previously she had complained of pain in nape of neck, of dorsal spine, and of general lassitude with a sense of heaviness. I found her unconscious, with contracted pupils; small pulse, 130; hands and feet cold; face and ankles œdematous, which had come on during the latter part of pregnancy. Three attacks of convulsions had occurred in the day. She was stout, but flabby and pallid. Her bowels had been freely moved. I drew off the urine; it presented a sooty colour, and was highly albuminous. Another violent convulsion occurred during my visit. Cold applications had been made to the head; but as it was not now hot, they were discontinued. She had also had an

opiate; this advisedly was not repeated. Bloodletting being contra-indicated by her condition of health, I placed her at once under chloroform, as the most suitable sedative for the case, and advised continuance of anæsthesia till delivery. The patient being weak, strong beef-tea enemata were exhibited from time to time.

At 5.30 a.m. the liquor amnii came away, the os uteri being then fully dilated. The birth followed without aid at 9; the child living, but thin and feeble; its development corresponded with the supposed period of gestation. Placenta followed without trouble. The patient was under anæsthesia at the child's birth. I saw her again later in the morning; she was then conscious, and had had no return of convulsions. Beef-tea was continued, with the addition of a little weak brandy and water. Catheterism was required; the urine drawn off still smoky and albuminous; pulse 120.

December 10th.—Patient doing well. Pulse 85. Catheterism required. An aperient draught had been rejected by vomiting; purgative pills, of colomel and compound colocynth, then given, acted in due time.

The patient made a perfect recovery, the urine gradually losing the albumen and unnatural colour. The child died this morning, having got progressively weaker. The patient called upon me with her husband at the end of a month, before leaving for Scotland, and looked well.

Case 17.—*Occurring after mental disturbance, and following spontaneous delivery, child living; treated by catheterism, purgatives, blister to nape.*—June 23rd, 1868, at midnight, I was consulted by a medical friend in the case of a young lady, æt. 18, who had that morning, after a tedious labour, given birth to her *first* child, living, one of large size, and presenting the head. She had had mental disturbance before labour. I found her strongly convulsed; three fits occurred in my presence, each followed by coma and stertor. As she had had a copious hæmorrhage in the placental stage of labour, I did not judge

further loss of blood advisable, especially as the pulse was easily compressed. Two pints of urine were removed from the bladder by the catheter; a powder of calomel, three grains, croton oil, one drop, was placed on the back of the tongue; an enema was exhibited of turpentine and aloes with soap and water. The tongue had been duly guarded by placing a small piece of firewood between the molars. The hair was removed from the occiput, a blister applied to it and the nape.

June 24th, 1 p.m.—Pulse 80, and soft. No more fits had occurred, the bowels had acted freely, patient was sleeping calmly and naturally. Before going to sleep she had been for some hours conscious. Urine had passed without the catheter. Several weeks after, I saw my late patient in perfect health.

Case 18.—*Convulsions preceded by albuminous urine, anasarca, and head symptoms; treated by bloodletting, purging, and forceps delivery of a living child.*—In the latter part of August, 1865, I was consulted by a surgeon in Sussex, anxious about his wife's approaching and *first* confinement, apprehending, with good reason, and from the presence of albuminuria, lumbar pains, anasarca, and severe headache, that convulsions would probably supervene. In reply I agreed in there being grounds for apprehension, and suggested bloodletting by cupping from the loins, purging by saline aperients, abstinence from stimulants, hoping thereby to avert the threatened disease. The purging was fully carried out, but the cupping was unsuccessful, and no other form of bloodletting was substituted for it at that time. The anasarca and albuminuria continued undiminished.

On the 18th of September labour set in, and soon after the dreaded convulsions also, upon which the patient was at once bled from the arm to about a pint; thereupon the convulsions ceased for a time, and a child was extracted living by the forceps. The convulsions returned in six hours after delivery, and again an hour later. Bleeding was now repeated, after which calomel was exhibited, also a

turpentine and assafœtida enema. The nape of neck was blistered. Severe headache recurred for twelve days intermittingly, and was for a time benefited by quinine. Later her health was so far restored by ammonio-citrate of iron and other tonic treatment, that towards the end of October she was described as being pretty well. The dropsical effusion had entirely disappeared shortly after delivery, but there still remained some degree of albuminuria. For this I suggested, as proper for renal derangement, flannel clothing and other precautions, especially during the coming winter and spring.

CASE 19.—*Convulsions on the fifteenth day after delivery, from an emotional cause; treated by chloroform and purging.*—November 20th, 1865, Mrs. D. G., aged 38, of corpulent habit, fair complexion, red hair, of hysterical tendency, was delivered by me at full term and easily of a female child, living, it being her sixth pregnancy. Up to the fifteenth day she was doing as well as after her five previous labours, in which I had attended her. Her husband on that day, without reflecting on the consequences which might arise from his imprudence, abruptly referred in conversation to the death of her only son, which had happened in the country a few weeks before her confinement. The child's death had been a great grief to her. Shortly afterwards she was seized with violent convulsions, affecting the face, muscles of the jaws, the limbs, and rest of the body. As she was at first conscious and did not injure her tongue, I concluded that the attack was simply hysterical, only much more severe than any I had occasionally seen her in. Very soon, however, the characters of an epileptic seizure were evident. The patient became unconscious, her tongue was bitten, she had foaming at the mouth, the face became swollen and livid, the carotid arteries throbbed, the jugulars and superficial veins of the neck became prominent. The urine, when tested, showed the smallest trace of albumen. The patient had never before had an epileptic attack, but that this was of that nature there could be no doubt. It was

evident also that the emotion by which she had been affected in the manner stated, with its accompanying congestion of the nervous centres, had initiated the attack. The bowels and bladder had been properly relieved, there had been no premonitory symptoms, and the condition of the urine did not show any predisponency to the attack. The convulsions were frequently repeated, only partial conciousness returning in the intervals.

Chloroform was administered, and had to be continued more or less throughout the day. At times some of the paroxysms were arrested by flapping the corner of a wet towel upon the face, but the chloroform proved the most powerful sedative. During an interval, when the patient could swallow, a dose of calomel and scammony was given, which acted freely. The patient had nineteen paroxysms during the day; the last, however, hysterical and accompanied by consciousness. They had gradually become weaker. After this there was no return of fits, but the next day the mind was confused. The patient needed to be kept very quiet, and the room darkened for two or three days. She then steadily recovered under good nourishment with a moderate amount of stimulant. Within three years after, being again pregnant, she was delivered naturally of a living girl without any subsequent illness, and was attended for me during my holiday in September last year by Dr. Gustavus Murray.

Case 20.—*The convulsions preceded by delirium; bloodletting, purging, and blistering of nape; delivery spontaneous.*—March 24th, 1866, I was called by a medical friend to E. H—, æt. 20, a primipara, at or near full term. She had had delirium at six the evening before; at half-past seven she was attacked by decided epileptiform convulsions; these were repeated at nine. Calomel and jalap were given during an interval. Before 11 p.m. two more fits occurred, then there was a cessation of fits till two this morning, when they recurred and continued till three. The bowels then acted. The pulse up to this appearing weak had

deterred my friend from bleeding, but it now being stronger, he abstracted twelve ounces of blood, which flowed thick and dark. In a quarter of an hour he loosened the bandage and took as much more as would flow—eight ounces—and then gave her a full dose of calomel with croton oil.

At 5 a.m., the patient continuing insensible and convulsed, I was called in. Examination discovered os uteri nearly fully dilated, the head descending naturally. I ordered some urine in the bladder to be drawn off, the hair to be cut away from the back of the head, cold bladder to be applied to occiput. As the delivery was being accomplished naturally, instrumental aid was not necessary. A male child, still-born, was quickly expelled, and the placenta followed without trouble. Consciousness not returning soon after delivery, a blister was, at my suggestion, applied to nape of neck. This vesicated well, and I was subsequently informed that the patient made a good recovery.

Case 21.—*Cephalalgia; lumbar pains; œdema of face, hands, &c., preceded the convulsions; chloroform; delivery by forceps.*—Mrs. W—, æt. 23, a primipara, was attacked by convulsions at near full time. For two months previously she had pain in head and loins, swelling of ankles, hands, and latterly of face.

I was called in to this case on the 12th of April, 1865, at eleven at night. The waters had been discharged by the finger eight hours after the attack, I thought injudiciously so, and the patient had then been freely purged by medicine.

I found the os uteri of half-crown diameter, its boundaries rigid. The convulsions were continuing with increasing severity. The tongue had been much bitten before assistance was obtained. Not deeming the patient a good subject for bloodletting, I did not resort to it, but at once placed her under chloroform and left directions with her attendant to continue its exhibition until delivery. The case thus gradually progressed, the rigidity of os uteri softened down, and at eight in the morning, there being full dilation and the head arrested at pelvic outlet, the forceps were applied.

The child, a male, which had apparently been dead for some time, was easily delivered. Consciousness was not perfectly recovered till the fourth morning after delivery. The patient required aperients only after delivery, and made a good recovery. I suspected albuminuria in this case and uræmia; but I had not the opportunity of testing the urine, as my direction for some to be kept for inquiry was neglected.

This patient has since given birth without complication to a healthy living child at term, and is in perfect health.

Case 22.—*The convulsions preceded by mental disquietude and renal disorder; chloroform, and forceps delivery; child living.*—Mrs. A—, æt. 26, a primipara, after much mental disquietude, was taken in labour one Sunday morning in June, 1867. I was called to her by her medical attendant on account of her having been seized with puerperal convulsions. I found her face and ankles puffy; her pulse 90, very compressible; she lay unconscious. The first stage of labour had been passed through so rapidly, and apparently without pain, that labour was first recognised at my visit. On examination I found the waters had escaped, and that the os uteri was fully dilated; the head, in first position, had descended into pelvic cavity.

I decided at once, as convulsions were recurring, on forceps delivery. Eight ounces of urine of colour of porter were first drawn off by catheter; it contained much albumen. Subsequent microscopic examination of deposit showed sparing quantity of urates, abundance of exudation-corpuscles, blood-discs, and some tube-casts. The patient being placed under chloroform, a living child was extracted. The placenta, thrown off soon after, was removed manually from the vagina. The convulsions did not return after delivery. The uterus contracted well. The last I heard of this patient was that she was slowly recovering, the tardiness of her convalescence seeming to be due to remains of renal derangement and the state of health connected with it.

Case 23.—*Puerperal convulsions following delivery, pre-*

ceded by headache, singing in the ears, œdema, renal derangement; treated by purgatives, mild diuretics, &c.—September 2nd, 1867. A patient of Royal Maternity Charity æt. 26, was attacked by puerperal convulsions in this, her *third* confinement, at 5.30 p.m., on the third day after delivery of a female child, living. She had felt confused during the day, had headache and singing in the ears, dark-coloured urine, and œdema of the ankles. Suddenly she screamed, became unconscious, was convulsed, livid in the face, had foaming at the mouth, bit her tongue.

Being a weakly subject, and the fit having passed off, when aid arrived an hour later, she was first treated by aperients, also by acetate of potash and nitrous ether. Subsequently she took cinchona bark, later perchloride of iron. She had no repetition of the convulsions. Her recovery was gradual, but in the end satisfactory.

Case 24.—*Convulsions in a twin labour, preceded by headache and epistaxis, œdema with albuminuria; children born living; treatment, purging only.*—A patient, æt. 29, in her second pregnancy, of sallow aspect, with slow pulse, œdema of ankles and face, was taken with labour-pains at seven o'clock one morning. At the same time she fell out of bed in a fit of convulsions, and the waters of the ovum were simultaneously discharged. Lately she had suffered from headache, and had had epistaxis.

The patient continued to be convulsed, and in the mean time gave birth to *one* living child, a boy, at nine in the morning, and at eleven to a *second* twin boy, also living. The twin placenta came away in one mass soon after the second child. I drew off some urine, and found it to contain albumen one third of its bulk. The patient's shattered health forbade bleeding, and for the same reason I preferred, as the convulsions were now very slight, to avoid chloroform. I ordered a purgative containing croton oil, and an enema containing soap and aloes, to clear out of the bowels any possible cause of irritation, as they had not been lately open. The bowels were fully moved, after which

the convulsions entirely subsided, and the patient made a slow but progressive recovery.

CASE 25.—*Convulsions under twin labour; male children, living; good recovery.*—The attack occurred just before delivery; hæmorrhage following the birth proved the cure of the convulsions. The children, both born spontaneously by head presentations, were of the male sex and living.

CASE 26. — *During labour of twins, with a similar result.*—In this case the children were also males, and born living, without instrumental aid, after bloodletting and purging had been had recourse to. The mother did well.

CASE 27.—*Another twin labour with convulsions; subsequent death of the twins; peritonitis fatal on eighth day.*—A sixth labour. The convulsions ceased after application of eight leeches to the temples and purging; and the delivery of two female children, living, followed spontaneously. But they died on the subsequent day, and the mother sank from asthenic peritonitis, dying on the eighth day after delivery, there being a suspicion of renal disease.

CASE 28.—*Induced by mental emotion; version under chloroform, followed by mania, treated by purgation, opium, and good nourishment.*—March 23rd, 1868, I saw a patient of the Royal Maternity Charity, æt. 34, in her *third* pregnancy. She was attacked by convulsions at 10 a.m., the waters having come away at 8.30 a.m. without painful action of the uterus. The attack seemed to have had an emotional source. She had been much excited by the death of a poor neighbour from hæmorrhage after a premature birth, induced by the shock of the explosion at Clerkenwell prison. She had also been weakened by scanty food. The head presented over the brim, above reach of the forceps. I had her immediately chloroformed; delivery was then easily effected by version, without re-exciting a fit. The child was

dead. There was a recurrence of milder fits the same day and the following day. Calomel, three grains, followed by a black draught, was given during an interval when the patient could swallow. As this did not act sufficiently, calomel and scammony were given the next morning, and an enema of a quart of soap and water. Full evacuation of the bowels then followed. I then ordered a full opiate; it was, however, inadvertently omitted by the nurse. After a sleepless night, the patient became now the subject of violent mania, and I was hastily summoned. Battley's Sedative, fifty minims, strong beef-tea, and brandy, were now given by my directions. After this she slept for several hours, and awoke perfectly sane and calm.

As this patient was not a plethoric subject, and had been reduced by mental shock as well as by insufficient food, all opportunities of giving her strong nourishment in a liquid form were taken; and her health was afterwards so perfectly restored by nutritious food and tonics that by the end of the month she was able to walk some distance to return her thanks, and has continued since to go on well.

Case 29.—*Bloodletting followed by spontaneous delivery of a living child.*—A primipara, æt. 19, a patient in my district of the Royal Maternity Charity, was in present year (1869) seized with convulsions at beginning of labour. She was seen, in my behalf, by a neighbouring surgeon, who immediately bled her to a pint, and applied cold water douche to face. Natural delivery followed, of a living child, in three hours after the bleeding. A purgative was subsequently given. The convulsions continued in a subdued form for ten hours, after which the patient recovered.

Case 30.—*Convulsions preceded by obscure vision, drowsiness, delirium, albuminuria, œdema; induction of labour; good recovery.*—During last summer (1868) I was summoned to a lady, æt. 47, residing a few miles from London. She presented a full habit, congested features, a feeble action of heart. She had advanced, it was believed, to six and a half months in her fourth pregnancy, after an interval of seven

years from the last pregnancy. She had been attacked by obscure vision and drowsiness; her legs and hands were œdematous, the urine dark coloured, scanty, and albuminous. The fœtal pulsation was very distinct on auscultation over the abdomen. The bowels not having been sufficiently open, I ordered brisk purging and accustomed stimulants to be withdrawn. I suggested that convulsions might be apprehended, if these measures did not afford speedy relief, and it was arranged that, if those symptoms did not subside under the treatment, I should be again sent for with the view, as I suggested, of inducing labour. Our fears and intentions were mentioned to the relatives, but were, of course, not disclosed to the patient.

The next morning more urgent symptoms connected with the cerebral functions had appeared in the form of delirium, &c., and I received a hasty summons; but before my arrival, which was speedy by train, violent convulsions had supervened.

The patient was now at once placed gently under chloroform, a stimulant being preparatorily given during an interval of consciousness, on account of the heart's feeble action. I then induced and completed labour by the use of Barnes's dilators, and this in the course of the afternoon.

During this attendance the bladder had to be relieved by the catheter. The child was small and dead, but not putrid. The placenta was healthy. The convulsions were not repeated. After delivery the urine quickly improved in character and became more copious. The patient recovered quickly her former state of moderate health.

Case 31.—*Convulsions threatened; prophilactically treated by bloodletting and purging.*—A midwife of Royal Maternity Charity, of fair complexion, æt. 40, who had had twelve children, and was now (June, 1852) six weeks short of full term, consulted the physician of her district, the late Dr. Ramsbotham, and subsequently myself, about her state of health. Her apprehension that convulsions were threatened,

had caused herself and family much anxiety. Her habit was corpulent. She had anasarca, abundant albuminuria, and almost total blindness, with uncomfortable feelings about the head.

The result of our advice was that blood was taken from the head by cupping, and the patient well purged. This was carried out to a moderate extent, and delivery took place a week later without further interference, the child living. The patient gradually recovered her former state of health, but her clearness of sight, although improved, was never fully restored. She is still, however, at the end of sixteen years from the above date, able to follow her calling to a moderate extent, her daughter taking the night cases.

Case 32.—*Convulsions in a fifth pregnancy with twins, preceded by œdema, scanty urine, and mental disturbance; children both born living, one after version; good recovery.* —October 23rd, 4 a.m. A patient of R. M. C., æt. 29, fifth pregnancy, near full time. Her former labours had been good, and her four children living and healthy. The mother is in fair condition as to flesh. She had been attacked at between twelve and one this morning by puerperal convulsions; had had three paroxysms since, one just before my arrival, being at an interval of one hour and ten minutes from the previous fit.

In the first fit, before aid arrived, she had bitten her tongue, and blood-tinged foam was issuing from the mouth. Almost every muscle of the body partakes in the convulsive action; the face is livid. After the fit she has for a short time stertorous breathing and dilated pupils. Before the fit supervened the face was flushed and swollen. In the intervals between the paroxysms she exhibits a stupid intelligence. The hands and feet are not œdematous. The urine is scanty; there is none found in the bladder. The bowels had been opened by castor oil taken the day before, and she had, since the first fit, had a turpentine enema.

Premonitory symptoms had occurred in the form of sickness all the day before, with severe pain at epigastrium;

also in the loins for six weeks, with scanty reddish urine; likewise pain in the head. As to the apparent cause of the disease, the patient had had a great deal of excitement a few weeks before, owing to some difference with her husband about her youngest child. She had in a fit of temper left him and gone to her sister's, not returning for a week. Till latterly she had been walking a mile to and from her work daily, and found the exercise did her good; she only relinquished that and her employment quite recently, being ashamed of her unusual size.

The pulse 112, regular, but not strong; skin dry and slightly heated. Vagina relaxed; os uteri high up, also relaxed, but not to be reached by ordinary examination; abdomen unusually large, prominent, and distended. As bloodletting was not indicated, I decided to give chloroform and promote delivery under its influence, for it seemed evident that the disease would go on until delivery. During the short time preparations were being made another fit occurred, and turpentine stupes were immediately applied to the feet and legs. The patient being fully chloroformed, I passed up my hand gently within the os uteri, and, finding a breech presenting, ruptured the membranes, hooked the finger first in one groin, then in the other, and so brought it through the pelvis. The arms were next lowered, quickly the head also, by the usual manipulation, as a feebly pulsating cord rendered haste necessary. The child was asphyxiated on its birth, but fully restored by friction and the Silvester method of resuscitation. The child being separated and removed to the care of one of the attendants, I now placed my hand on the abdomen, and found the uterus still large and solid. Internal examination discovered a second child presenting by the head at the pelvic brim. The os uteri was inclined to contract; I thought it best, therefore, to deliver at once by version. Chloroform was continued, and version of the second child accomplished easily in its liquor amnii by the bimanual method. As the cord was pulseless, the child was at once extracted. It proved to be the larger of the two twins, and passed through

the pelvis with more difficulty. It was blanched, apparently lifeless, but persevering efforts at resuscitation at length restored it to vigorous life. Both children were females, of good size for twins.

The abdomen was then firmly compressed and the two placentæ were shortly removed; some hæmorrhage, probably to a pint or a little more took place before and subsequently to their removal. However, the uterus, under pressure and application of cold, readily contracted. I left the patient sleeping off the effects of the chloroform, with a fair pulse.

Visit between two and three in the afternoon.—Is now quite herself as regards intelligence. Pulse 94; pupils dilated. Complains of her tongue and inside of her cheek. Ordered calomel and scammony, three grains of each, to be taken at bed-time, to be followed by castor oil in the morning if necessary. Has still some pain in her loins, for which a linseed and mustard poultice is ordered. Diet, gruel and beef-tea.

24th.—Pulse 90; pupils still large. Passes more water; it contains no albumen. Bowels freely opened. Lumbar pains much better. Aspect greatly improved. Lochial discharge going on naturally.

27th.—Has been doing well since last visit. Urine more abundant. Bowels opened to-day from castor oil. The loins not entirely free from pain. Is still to abstain from spirituous drinks. Is now taking butcher's meat with appetite. A new flannel bandage ordered to be worn round the loins.

November 3rd.—Further improvement; she is now able to suckle her children. I visited her a week later. She was sitting before the fire, feeling stronger, and her twins were doing well—one nourished wholly, the other partly by its mother's milk. A later account reported her and her children doing well.

Case 33.—*Puerperal convulsions at the onset of labour and preceded by delirium; fatal before treatment could be applied, and without delivery.*—The following case did not come

under my inquiry till after the death of the subject of it. In the summer of 1846 I was summoned by the coroner to attend at Hornsey to investigate the cause of death in pregnancy of a woman of about thirty-five years of age, mother of four children, wife of a labouring man.

When near full period of pregnancy she roused her husband in the middle of the night, declaring that she felt pains of labour, also that she could distinctly see two men standing at the foot of her bed. She implored her husband to go for the "doctor," but he assured her she was only dreaming, and, desiring his wife to go to sleep, was soon himself again in his slumbers. Very shortly she roused him a second time, when he tried to pacify her, but in vain, so he went off for the desired assistance. After an inevitable delay the medical attendant arrived, just in time to see the woman die in a violent paroxysm of puerperal convulsions in the first stage of labour.

No blame could by possibility attach to any one, yet an inquest was thought necessary to quiet strange rumours afloat among the ignorant and excited neighbours. At the post-mortem examination the brain and other organs were found highly congested with blood, the heart empty and flaccid. The patient had been of robust habit, and evidently very plethoric. There was no trace of inflammatory or other effusion in or upon the brain. It was clearly shown by the condition of the organs that the deceased must on the appearance of her delirium have greatly needed free bloodletting. As the medical attendant had not the opportunity afforded him, a fatal result was the consequence, which in opposite circumstances would probably have been averted.

There was no history of any warning before the occurrence of the delirium in this case, and the urine found in the bladder presented a normal appearance. The child, of full-term growth, was still in utero, enveloped in its liquor amnii. The head presented, the os uteri was dilated to about the diameter of a shilling, and all appeared fair for a good labour had the complication not occurred.

Case 34.—July 26th, 1866, a primipara, æt. 18, robust, and of previous good health, a patient of the Middlesex Hospital, was seized with eclampsia. The soft parts were in a favorable condition for delivery, the presenting head was reported by the attendant to have been at the outlet two and a half hours. In my absence the then resident obstetric officer, Mr. W. Draper, attended and immediately delivered the patient, by the forceps, of a male child, slightly asphyxiated, but soon restored to vigorous life. The placenta followed spontaneously in fifteen minutes, with but slight discharge of blood. The uterus contracted well, and it was hoped that, the labour being over, the convulsions, which had now subsided, would not return. Very soon, however, they occurred with greater violence, the tongue being bitten. A guard for the tongue was immediately placed between the molars, cold applied to the head, sinapisms to the lower extremities, and, as soon as it could be swallowed, a dose of calomel and jalap was given; also, at intervals, a small dose of tartar emetic. The aperient powder was rejected by vomiting. The convulsions now again subsided, but returned in an hour and a half more severely than before; pulse 120, full, hard; respiration hurried, face flushed, skin hot, pupils contracted. Some urine collected in the interval exhibited, on testing, a very little albumen; no œdema had been noticed.

It was very evident that a more decided and active treatment was indicated than that hitherto adopted, to restore this patient and guard the nervous centres from serious injury. Accordingly, blood was now taken from the arm by a full stream, but twenty-five ounces flowed before the pulse became soft and compressible. The arm was then tied up, and the patient, at the same time, recovered consciousness. As the first purgative was vomited, a second was placed upon the base of the tongue, consisting of five grains of calomel and a drop of croton oil, which speedily acted. The convulsions did not return, and the patient presented herself with her child at the hospital to return thanks, at the usual time, and in good health.

Case 35.—The following case exemplifies the influence of a septic poison circulating in the blood in the production of convulsions. A lady, to whom I was telegraphed to Bedford in the autumn of 1863, by the late Dr. Herbert Barker, had passed through all the stages of labour without any unusual occurrence. The placenta and attached membranes, I was informed, had come away spontaneously and entire. Nevertheless, the lochia became offensive, great constitutional disturbance ensued, pulse 140, high temperature of the body, high-coloured and scanty urine, furred tongue, delirium, and, at length, violent convulsions. In this state I saw her. It was agreed that the internal warm water vaginal douche should be repeated as required, that she should be well sustained by strong beef-tea and other nourishment, and, as stimulants, by champagne, port wine, &c., with suitable tonics and sedatives, as circumstances indicated. Some time after my visit Dr. Barker wrote me word that a large abscess had appeared in one breast and in the lower part of the back, also many pustules about the pubes and vulva. Her case caused considerable anxiety to her medical attendant and her friends. The patient was placed on a water bed, and the tonic treatment persevered in most assiduously under excellent nursing. The result was that my late lamented friend Dr. Barker was rewarded for his fatiguing and anxious attendance by the complete recovery of his patient.

The source of the blood poisoning in this case was probably decomposing blood-clots, which had formed subsequently in a uterus relaxing somewhat from its former state of contraction.

The following is a summary of the preceding cases:

First pregnancy in 15 cases.

Subsequent pregnancy in 14 cases.

What pregnancy not stated in 3 cases.

The ages of the 15 primiparæ were—

At æt. 18 . .	2 cases.	At æt. 23 . .	2 cases.
„ 19 . .	2 „	„ 25 . .	1 „
„ 20 . .	3 „	„ 26 . .	1 „
„ 22 . .	1 „	„ 40 . .	1 „

In 2 cases the age is not given.

The ages of the multiparæ, of which one only (aged 40) had reached her thirteenth pregnancy, ranged from twenty-five to forty-seven, there being only one example of the latter age.

The report contains, further, three cases of apprehended convulsions, believed to have been averted by prophylactic treatment.

Of the 32 cases of actual convulsions recorded, there occurred—

Before labour	8
During labour	15
After delivery	9

There were premonitory symptoms or antecedents which might be viewed as causes of the disease in many of the cases, as follows :

1. Severe headache immediately before the attack.
2. Severe pain in occipital and cervical region in a primipara aged 40.
3. Pain in nape of neck and dorsal spine, general lassitude, with sense of heaviness, œdema of face, albuminuria.
4. Severe headache, lumbar pains, albuminuria, anasarca.
5. Delirium.
6. Headache, lumbar pains, œdema of face, hands, &c.
7. Renal derangement and mental disturbance.
8. Headache, tinnitus aurium, albuminuria.
9. Headache, epistaxis, œdema, albuminuria.
10. Head symptoms, œdema, albuminuria.
11. Head symptoms, greatly impaired vision, anasarca, and abundant albuminuria.

12. Pain at epigastrium and sickness, with lumbar pains and cephalalgia.

13. Hemiplegia after scanty nourishment, supervening during pregnancy.

14. Indigestion acting upon the gastric excitor nerves of the excito-reflex system.

15. Intestinal irritation from previously neglected bowels, acting on the intestinal excitor nerves of the reflex function of the nervous system, was a probable cause in some of the cases.

16. Retention of urine, acting on the excitor nerves of the bladder, was probably an important element of causation in at least one case.

17. The gall-bladder distended with biliary calculi, as ascertained by post-mortem examination, was probably the exciting cause in another case.

18. The presence of the hand in the uterus to remove an adherent placenta acted as the excitor of the convulsions in a fifth case.

19. Violent mental emotion, acting on the hemispheres, and through them on the spinal marrow and spinal system of nerves, is mentioned as an apparent cause of the convulsions in four of the cases.

The kinds of delivery in the 31 cases in which childbirth had preceded or followed the convulsions:

Normal, 15 single, 4 twin births, in . .	19
Induction of labour at $6\frac{1}{2}$ months in . .	1
Manual aid in breech births (1 single, 1 twin labour), the convulsions continuing rendering it necessary	2
Turning and delivery by the feet on account of the convulsions—1 twin, head presenting; 1 single birth, head presenting, in . .	2
Forceps delivery on account of continuing convulsions or apprehension of their return, 5 single births	5

Craniotomy after failure of forceps, convulsions preceded and followed delivery in . 1
Embryotomy for impacted arm presentation, patient hemiplegic before labour, convulsions immediately followed delivery in . 1

31

The results to the 36 children born, viz. in 26 single labours, 5 twin labours, were as follows :

26 living, viz. 21 without operative interference—
13 single births,
8 twin children.
1 twin, head presenting, by turning.
1 twin, breech presenting, by manual aid.
3 single births by forceps.

26

10 still-born, viz. 4 born without operative aid, head presentations.
2 forceps deliveries.
1 breech.
1 craniotomy.
1 embryotomy, arm presentation.
1 after induction of labour at $6\frac{1}{2}$ months.

10

In 24 cases the convulsions preceded delivery ; here, 14 children living, 10 still-born.

The treatment pursued in 30 cases of convulsions which came under medical care was as follows :

Bloodletting followed by purging, sinapisms when necessary, and in 2 by opium, in . .	18	cases.
Chloroform with or without purging in . .	7	,,
Purging and sinâpisms in	3	,,
Opium in	1	,,
Tonic and antiseptic, treated with strong nourishment and stimulants, in a case of septic origin	1	,,
	30	,,

The result to the mothers in those 30 cases of convulsions so treated was as follows:

27 recovered perfectly.

1 with hemiplegia, which had long preceeded the convulsions.

2 died:—1 of asthenic peritonitis,
1 with gall-bladder distended by calculi, in the second paroxysm.

The result to the mothers in the 3 cases of threatened convulsions treated prophylactically:

1 recovered perfectly.

1 recovered with some dimness of vision, which had, however, long preceded delivery. She is still, at the end of sixteen years, in tolerable health.

1 recovered her former state of health, imperfect from her being hemiplegic.

A CASE OF SPINA BIFIDA.

By David Lloyd Roberts, M.D., M.R.C.P. Lond.;
PHYSICIAN TO ST. MARY'S HOSPITAL, MANCHESTER.

The child, a female, five months old, was admitted a patient of St. Mary's Hospital on July 30th, 1869, and died on November 26th, 1869. At its birth a small

tumour was noticed by the midwife at the lower part of the back, about the size of an egg, which gradually increased until it attained the dimensions of the two closed hands. It

FIG. 14.

was pediculated, the pedicle being about the thickness of two fingers, leading to the supposition that the abnormal spinal opening was small. The skin covering the tumour was inflamed and excoriated; occasionally a small spot

ulcerated, fluid issued from it; then it became closed up for a few days, opening again, and fluid oozing away as before. This continued more or less up to the day of its death. The child sucked well and regularly. There were occasionally slight convulsions. The lower extremities were often cold, and appeared paralysed; the bowels were irregular. There was no hydrocephalus or other malformation. The tumour only was examined after death. On cutting into the growth it was found to be filled with clear limpid serum. On the anterior portion of the sac, and attached to it, was a plexus of nerves, five or six in number, issuing through a small aperture in the vertebræ, of the dimensions of an ordinary sized quill. There only appeared to be a deficiency of the spinous process. Although the spina bifida in this patient was more pediculated than we usually find in cases of this description, it is extremely improbable that any radical treatment would have been of service, on account of the nervous element found after death intersecting and attached to the parietes of the sac. The accompanying drawing will explain the position of the tumour.

		1859.			1860.			1861.			1862.			1863.		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
INCOME.	Subscriptions	336	0	0	409	10	0	449	8	0	478	15	0	474	12	0
	Sale of Transactions	...			11	0	6	46	18	9	48	9	5	55	17	1
	Interests on Consols, &c.	...			...			1	2	4	8	19	0	15	12	5
	Total Income	336	0	0	420	10	6	497	9	1	536	3	5	546	1	6
EXPENDITURE.	Transactions	...			189	4	0	187	6	7	267	2	0	214	15	7
	General Expenses	163	0	6	117	5	0	124	16	8	136	19	1	130	2	10
	Library and Museum	...			...			...			...			...		
	Catalogue of Instruments	...			...			...			...			...		
	Conversazione	...			...			...			...			...		
	Special Meeting	...			...			...			...			...		
	Total Expenditure	163	0	6	306	9	0	312	3	3	404	1	1	344	18	5
INVESTMENTS.	Cash Balance in each Year	172	19	6	287	1	0	472	6	10	204	9	2	255	12	3
	Invested in Consols	...			...			...			400	0	0	150	0	0

Society of London for the Eleven Years ending December, 1869.

1864.	1865.	1866.	1867.	1868.	1869.	TOTALS.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
469 7 0	425 5 0	*580 2 0	553 7 0	567 0 0	543 16 0	5287 2 0
40 9 6	69 4 7	51 2 1	81 14 6	62 7 2	74 11 2	541 14 9
20 2 1	25 12 7	29 0 9	29 17 8	32 14 6	33 19 7 †5 0 0	202 0 11
529 18 7	520 2 2	660 4 10	664 19 2	662 1 8	657 6 9	6030 17 8
226 2 1	214 11 5	246 6 9	222 5 11	215 17 3	179 11 10	2163 3 5
115 12 4	117 4 0	117 11 3	134 13 4	128 19 0	134 11 4	1420 15 4
...	65 14 6	51 9 6	51 14 0	186 15 5‡ 219 9 1§	244 7 2	819 9 8
...	...	121 11 4	34 16 5	...	...	156 7 9
...	...	211 16 11	...	...	...	211 16 11
...	...	...	37 5 5	...	...	37 5 5
341 14 5	397 9 11	748 15 9	480 15 1	751 0 9	558 10 4	4808 18 6
262 6 5	234 18 8	96 7 9	180 11 10	91 12 9	115 9 2	
181 10 0	150 0 0	50 0 0	100 0 0	...	75 0 0	1106 10 0

* Including Special Donation of £10 by Dr. Greenhalgh.
† Payment by Sun Fire Office for Damage by Fire.
‡ Furniture, } of Library and
§ Current Expenses, } Museum.

INDEX.

PAGE

Abstract of receipts and expenditure of the Obstetrical Society for eleven years, ending December, 1869 . . . 316
Abscess of female urethra (Dr. Cory) 65
Address of the President, John Hall Davis, M.D., January, 1869 15
Address of the new President, Graily Hewitt, M.D., February, 1869 27
Amalgamation, see *Societies*.
Ammonia, injection of, into the veins in puerperal fever; recovery (Dr. Tyler Smith) 247
Amnion, dropsy of the (Dr. Rasch) 55
Amniotic sacs, on the relative occurrence of one or two, in cases of twins (Dr. Brunton) 67
Amputation of the cervix uteri (Dr. Meadows) . . 102
ANDREWS (Dr. H. C.) *Remarks* on a case of mollities ossium, and delivery by Cæsarian section . . . 207
Annual General Meeting, January, 1869 . . . 1
AVELING (Dr. J. H.) new principle of treatment in prolapsus and procidentia uteri 215
—— *Discussion* on ditto 217
—— *Remarks* in the discussion on Dr. Barnes' paper on hæmorrhage after labour 239
—— —— on Dr. T. Smith's paper on injection of ammonia into the veins in puerperal fever 250

BAILEY (Mr.), *of Thetford*, suggestions to Infant Mortality Committee 146
BALLARD (Dr. Thomas), *Remarks* in the discussion on infant mortality, and on Dr. Selby Norton's paper on teething . 187
—— —— on "fruitless sucking" 187
BARNES (Dr.), new method of embryotomy . . . 126
—— *Discussion* on ditto 127

PAGE

BARNES (Dr.), head of a child delivered by cephalotripsy with the instrument (Hicks's) attached . . . 191
—— on the treatment of hæmorrhage after labour (by the use of perchloride of iron, &c.) 219
—— *Discussion* on ditto 235
—— *Remarks* in moving the second resolution, &c., at the meeting on the Amalgamation of the Medical Societies . 157
—— —— on Dr. L. Tait's case of reduction of chronic inversion of the uterus by sustained pressure . . . 176
—— —— on Dr. Westmacott's whalebone loop . . 183
—— —— on Dr. Woodward's paper on support during labour 195
—— —— on cases of labour complicated with ovarian disease . 201
—— —— on procidentia uteri 218
—— —— on injection into the veins in puerperal fever . 250
—— —— on the management of ovarian tumours complicating pregnancy 267
BATEMAN (Mr.), *Remarks* on cases of pregnancy associated with ovarian cystic disease 267
BLEASE (Mr.), *of Altrincham*, suggestions to Infant Mortality Committee 145
Blood-poisoning, in death, and decomposition of fœtus in a case of rupture of the uterus (Dr Greenhalgh) . . 9
BLOXAM (Dr.), suggestions to Infant Mortality Committee . 146
BROWN (Dr. Andrew) extra-uterine pregnancy, rupture of cyst, and death 7
BRUNTON (Dr.), knotted umbilical cord . . . 54
—— observations on cases of twins (on the relative occurrence of one or two amniotic sacs) 67
—— *Discussion* on ditto 71
—— *Remarks* at the meeting on the Amalgamation Scheme . 160
—— —— on the food of infants in the adjourned discussion on infant mortality 188

Cæsarean section, case of (Dr. B. Hicks) . . . 99
CARLYLE (Dr. D.), head of an anencephalous fœtus, with description of the labour 35
Cephalotribe, the (Dr. Matthews Duncan) . . . 42
—— *Remarks* on (Dr. B. Hicks) 43
—— fœtus delivered by the assistance of (Dr. B. Hicks) . 1
Cephalotripsy, head of a child delivered by, with Dr. Hicks's instrument (Dr. Barnes) 191

PAGE
Cervix uteri, inveterate case of ulceration of, cured with styptic colloid (Dr. Wynne) 86
—— amputation of (Dr. Meadows) . . . 102
CHAMBERS (Mr. T.) uterine fibroid tumour 31
CLEVELAND (Dr.), apparatus for injecting perchloride of iron in post-partum hæmorrhage 242
—— *Remarks* on Dr. G. Hewitt's paper on peritoneal adhesions of gravid uterus 118
—— —— on Dr. Barnes's method of embryotomy . . 127
—— —— on the treatment of post-partum hæmorrhage . 235
Clitoris, elephantine development of (Dr. Rogers) . . 84
COLLINGWOOD (Mr.), *Remarks* on sulphate of zinc saturated with sulphuric acid in ulceration of the cervix . . 94
Committee on Infant Mortality Report, see *Mortality of Infants.*
Convulsions, puerperal, illustrated by cases (Dr. Hall Davis) . 268
—— ditto; summary of the cases 309
Cord, see *Umbilical* cord.
CORY (Dr.), abscess of female urethra 65
—— tracheotomy in croup lasting fifty-seven hours, successful 78
Croup, lasting fifty-seven hours, successful tracheotomy in (Dr. Cory) 78
CURGENVEN (Mr. Brendon), hereditary twin-bearing family . 106
—— suggestions to Infant Mortality Committee . . 146

DAVIS (Dr. Hall), *Annual Address as President, January 6th,* 1869 15
—— on puerperal convulsions, illustrated by cases . . 268
—— ditto; summary of the cases 309
—— *Remarks* on a case of labour complicated with ovarian disease 202
—— —— on a case of ruptured uterus . . . 207
—— —— on the treatment of hæmorrhage after labour by perchloride of iron 237
DUNCAN (Dr. J. Matthews) on the cephalotribe . . 42
—— suggestions to Infant Mortality Committee . . 145

Ecraseur, single-wire, large fibroid polypus, removed by (Dr. Meadows) 241
—— fibroid polypus of fundus uteri, removed by (Dr. Lloyd Roberts) 244

PAGE

EDIS (Dr. A. W.) fibroid degeneration of uterus, with sub-peritoneal fibrous tumours in a state of disintegration . 34
—— hydrocephalic fœtus 173
—— four and a half months' fœtus, with encephalocele . 173
Election of New Fellows 1, 27, 53, 73, 97, 123, 169, 191, 209, 241
Embryotomy, new method of (Dr. Barnes) . . . 126
Encephalocele, four and a half months' fœtus with (Dr. A. Edis) 173

FARR (Dr.) *Remarks* in the discussion on the Report of the Infant Mortality Committee 149
Feeding bottle, new infants', "Perrett's Mamma" . . 169
Fibrinous deposits, remediable character of (Dr. Routh) . 98
Fibroid outgrowth from the fundus uteri (Mr. Spencer Wells) 73, 97
—— see *Tumours.*
Fœtation, extra uterine, tubal (Mr. Worship) . . 211
—— ditto, see *Pregnancy.*
Fœtus delivered by the assistance of the cephalotribe (Dr. B. Hicks) 1
—— death and decomposition of, in a case of rupture of the uterus (Dr. Greenhalgh) 9
—— four and a half months', with encephalocele (Dr. A. Edis) 173
—— anencephalous, (Mr. Sass) 31
—— —— (Dr. Carlyle) 35
—— ditto, with spina bifida (Dr. E. Jones) . . . 209
—— hydrocephalic (Dr. Edis) 173
FOWLER (Mr.) *of Wakefield,* suggestions to Infant Mortality Committee 144

GASKOIN (Mr. G.) suggestions to Infant Mortality Committee 147
GERVIS (Dr. H.) large polypus uteri . . . 4
—— *Remarks* on the obstacle of the inner tissue of the cervix to the action of the écraseur 106
—— —— on Dr. G. Hewitt's paper on peritoneal adhesions of gravid uterus 118
—— —— in favour of the third resolution at the meeting on the Amalgamation Scheme . . . 161
—— —— on a case of labour complicated with ovarian disease 202
GREENHALGH (Dr.) rupture of uterus, death, and decomposition of fœtus, blood poisoning, puncture of membranes, recovery of patient 9
GRIFFITH (Dr. de Gorrequer) curious monstrosity . . 5

PAGE

Hæmorrhage, uterine, post-partum, peritoneal adhesions of the gravid uterus as a cause of (Dr. G. Hewitt) . . 108
—— ditto; treatment of (Dr. Barnes) . . . 219
—— ditto; treatment of, with perchloride of iron (Dr. Barnes) 230
—— ditto; apparatus for injecting perchloride of iron (Dr. Cleveland) 242
Heart and lungs of an infant dead at fourteen days old (Dr. W. Williams) 242
Heckford (Mr.) suggestions to Infant Mortality Committee . 145
Hewitt (Dr. Graily) *Address on taking the Chair as President, February 3rd*, 1869 27
—— *Address, &c.*, at the meeting on the question of the Amalgamation of the Medical Societies . . 151, 160, 164
—— twins, with secundines from a case of hydrops amnii . 37
—— on dropsy of the amnion 55
—— on peritoneal adhesions of the gravid uterus as a cause of post-partum hæmorrhage 108
—— *Discussion* on ditto 118
—— bead suture for perineal operations . . . 121
—— *Remarks* on Dr. Martyn's case of extra-uterine pregnancy 61
—— —— on Mr. Houghton's case of fatal hæmorrhage . 83
—— —— on the pathology of ulceration of the cervix . 94
—— —— on Dr. Barnes's new method of embryotomy . 128
—— —— on the report of the Infant Mortality Committee . 149
—— —— on Dr. Selby Norton's paper on teething, and in the discussion on infant mortality . . 186, 190
—— *Remarks* on Dr. Barnes's case of cephalotripsy . . 192
—— —— on a case of labour complicated with ovarian disease 203
—— —— on the treatment of hæmorrhage after labour by perchloride of iron 239
Hicks (Dr. Braxton) fœtus delivered by the assistance of the cephalotribe 1
—— *Remarks* on the cephalotribe 43
—— case of Cæsarean section 99
—— new infant's feeding bottle, "Perrett's Mamma" . 169
—— cases of pregnancy associated with ovarian cystic disease 263
—— *Discussion* on ditto 266
—— *Report* on Mr. Spencer Wells' case of fibroid outgrowth from the fundus uteri 76
—— *Remarks* on Dr. Barnes's new method of embryotomy . 128
—— —— on accidents in the amputation of the cervix by the écraseur 105

PAGE

HICKS (Dr. Braxton) *Remarks* in proposing the fifth resolution at the meeting on the Amalgamation Scheme . . 165
—— —— on Dr. L. Tait's case of reduction of chronic inversion of the uterus, by sustained pressure . . 176
—— —— on Dr. Barnes's case of cephalotripsy, with Dr. Hicks's instrument 192
—— —— on cases of labour complicated with ovarian disease . 200
—— —— on Dr. Barnes's paper on the treatment of hæmorrhage after labours 237
HIME (Mr.) *of Sheffield*, suggestion to Infant Mortality Committee 144
HODGSON (Mr. Wm.) Twins, with secundines from a case of hydrops amnii 37
HOLMAN (Dr.) *Remarks* on Dr. G. Hewitt's paper on peritoneal adhesions of gravid uterus 118
—— —— at the meeting on the Amalgamation of the Medical Societies 156
HOUGHTON (Mr. Hyde) hæmorrhage fatal in forty minutes . 81
Hydramnios, case of (Dr. Rasch) 55
Hydrocephalic fœtus (Dr. Edis) 173
Hydronephrosis of the fœtal kidneys impeding labour (Dr. Madge) 55
Hydrops amnii, secundines from a case of (Dr. G. Hewitt) . 37
Hysteroper, new (Professor Lazarewitch) . . . 78

Imperforation, see *Vagina.*
Infants, see *Mortality of.*
Inversion, see *Uterus.*
Iron, perchloride of, use of, in uterine hæmorrhage (Dr. Barnes) 230
—— apparatus for injecting in post-partum hæmorrhage (Dr. Cleveland) 242

JONES (E.) anencephalous fœtus with spina bifida . . 209

Kidneys, fœtal, hydronephrosis of, impeding labour (Dr. Madge) 55
Labour, see *Parturition.*
Lamb (Dr. John Stewart), death of . . . 19
LAZAREWITCH (Professor) instruments of; new hysteroper, intra-uterine stems, and uterine sound . . . 78
Library, report and notices on . . . 13, 22

PAGE

List of Officers elected for 1869 14
—— —— *for* 1870 v
—— *of Honorary Fellows* ix
—— *of Ordinary Fellows* xi
—— *of deceased Fellows*, 1868 [*with obituary notices*] . . 15-21
—— *of past Presidents* vi
—— *of Referees of Papers* vii
—— *of Honorary Local Secretaries* viii
Loop, whalebone, on its use in delivery (Dr. Westmacott) . 177

Mackenzie (Mr. George Wise) of Thetford, obituary notice . 18
MACKINDER (Dr.) suggestion to Infant Mortality Committee . 146
MACRAE (Mr.) *of Lewes*, suggestions to Infant Mortality Committee 146
McVEAGH (Dr.) *of Coventry*, suggestions to Infant Mortality Committee 145
MADGE (Dr.) case of hydronephrosis of the fœtal kidneys impeding labour 55
—— four cases of congenital imperforate vagina and one case of congenital phymosis, in the same family . . 213
—— *Report* on Dr. Martyn's case of extra-uterine pregnancy . 62
—— *Remarks* at the meeting on the Amalgamation Scheme . 162
MARLEY (Mr.) *of Padstow*, suggestion to Infant Mortality Committee 145
MARTYN (Dr. Wm.) extra-uterine pregnancy terminating in sudden death 57
—— *Discussion* on ditto 61
—— *Report* on ditto, by Drs. Martyn, H. Madge, and J. J. Phillips 62
—— case of triplets at eight months of pregnancy . . 208
MEADOWS (Dr.) new vaginal speculum 3
—— new hysteroper, uterine stems and sound of Professor Lazarewitch 78
—— case of amputation of the cervix uteri . . . 102
—— *Discussion* on ditto 105
—— large fibroid polypus removed by the single wire écraseur 241
—— *Remarks* in moving the third resolution at the meeting on the Amalgamation of the Medical Societies . 159, 164
Medical Council—*Resolution for a Memorial to the Home Secretary, &c., for the direct representation of Obstetrics in the General Medical Council* 14
—— *Particulars of the deputation and presentation of the Memo-*

PAGE

rial "for the representation of Obstetrics in the General Medical Council," to the Home Secretary [with the text of the memorial] 123-5
Meeting, Annual General, January, 1869 1
—— *Special General, on the Amalgamation of the Medical Societies* 151
Menstruation, on the age at which it commences (Mr. W. Rigden) 243
MITCHELL (Mr. J. T.), case of ruptured uterus in the seventh month of pregnancy, death from peritonitis . . 204
—— *Discussion* on ditto 207
Monstrosity, curious (Dr. de Gorrequer Griffith) . . 5
—— case of double (Dr. J. F. Rogers) . . . 128
Mortality among Infants, notice of the Special Committee on . 24
—— Report of the INFANT MORTALITY COMMITTEE . 132
—— —— *Suggestions made by various Fellows to the Committee* . 144
—— —— *Discussion* on the Report . . . 149
—— —— *Adjourned Discussion* on ditto . . . 186
MURRAY (Dr.) knotted umbilical cord, of unusual character . 54
—— intra-uterine fibroid removed by single wire écraseur . 78
—— *Remarks* on the value of styptic colloid in ulceration of the os and cervix 93
—— —— at the meeting on the Amalgamation Scheme . 166
—— —— on a case of labour complicated with ovarian disease. 200
—— —— on pregnancy associated with ovarian cystic disease 266

NICHOLLS (Dr.) *of Chelmsford*, suggestions to Infant Mortality Committee 147
NORTON (Dr. Selby) on teething 183
—— *Discussion* on ditto 186

Obituary notices of Deceased Fellows :—

Dr. M. W. Turnbull	15	Dr. J. H. Ramsbotham	18
Dr. Edward Ray	16	Dr. Francis Ramsbotham	19
Mr. J. Hasledine Tutin	18	Dr. J. Stewart Lamb	19
Mr. G. Wise Mackenzie	18	Dr. John M. Pagan, *Hon. Fell.*	19

Obstetrics, representation of, in the Medical Council, see *Medical Council.*
Ovarian disease (Mr. Worship) 76
—— —— case of parturition complicated with (Mr. Warn) . 198
—— —— on the complication of pregnancy with (Mr. Spencer Wells) 251
—— —— cases of pregnancy associated with (Dr. B. Hicks) . 263

PAGE
Ovum, unusual appearance of one thrown off at the second month (Dr. Rogers) 80

Pagan (Dr. John M.) of Edinburgh, *Hon. Fellow*, obituary notice 19
Parturition, instrument to aid the abdominal muscles in (Dr. P. Smith) 169
—— on the use of the whalebone loop in (Dr. Westmacott) . 177
—— on mechanical support during (Dr. W. Woodward) . 192
—— case of, complicated with ovarian disease (Mr. Warn) . 198
—— hæmorrhage after, treatment of (Dr. Barnes) . . 219
—— —— see *Hæmorrhage* (post-partum).
PAYNE (Dr.) *of Wimbledon*, suggestions to Infant Mortality Committee 145
Perchloride, see *Iron*.
Perinæal operations, bead suture for (Dr. G. Hewitt) . 121
Peritoneal adhesions of gravid uterus as a cause of post-partum hæmorrhage (Dr. G. Hewitt) 108
Peritonitis, death from, in a case of ruptured uterus (Mr. Mitchell) 204
Pessaries, instrument to form a fixed point for attachment of (Dr. P. Smith) 169
Pessary, new intra-uterine, to correct deviations, &c. (Dr. Routh) 53
PHILLIPS (Dr. J. J.) *Report* on Dr. Martyn's case of extra-uterine pregnancy 62
—— *Remarks* in the adjourned discussion on infant mortality 188
Phymosis, one case of congenital, and four of congenital imperforate vagina in the same family (Dr. H. M. Madge) . 213
PLAYFAIR (Dr.) *Remarks* on Dr. Martyn's case of extra-uterine pregnancy 61
—— —— on Dr. Brunton's paper on twins (conjoined twins never of different sexes) 71
—— —— on Dr. J. F. Rogers' case of double monstrosity . 131
—— —— in proposing the fourth resolution, &c., at the meeting on the Amalgamation Scheme . 163, 164
—— —— on Dr. Westmacott's whalebone loop . . 183
—— —— on the treatment of hæmorrhage after labour by perchloride of iron 238
—— —— on the treatment of cases of pregnancy associated with ovarian cystic disease 266
Polypus uteri, large (Dr. Gervis) . . . 4

PAGE
Polypus uteri, large fibroid, removed by the single wire écraseur (Dr. Meadows) 241
—— fibroid, of the fundus uteri, removed by écraseur, recovery (Dr. Lloyd Roberts) 244
—— see *Tumour*.
Portraits, photographic, of Fellows, recent accessions . . 22
Pregnancy, ruptured uterus in seventh month of, death from peritonitis (Mr. Mitchell) 204
—— case of triplets at eighth month of (Dr. W. Martyn) . 208
—— on the complication of ovarian disease with (Mr. Spencer Wells) 251
—— cases of, associated with ovarian cystic disease (Dr. B. Hicks) 263
—— extra-uterine, case terminating in sudden death (Dr. W. Martyn) 57
—— —— rupture of cyst and death (Dr. A. Brown) . . 7
—— —— see also *Fœtation*.
Pressure, sustained, reduction of chronic inversion of the uterus by (Dr. L. Tait) 174
PRICE (Mr.) *of Leeds*, suggestions to Infant Mortality Committee 146
Prolapsus uteri, new principle of treatment in (Dr. Aveling) . 215
Puerperal convulsions, illustrated by cases (Dr. Hall Davis) . 268
Puerperal fever treated by the injection of ammonia into the veins; recovery (Dr. Tyler Smith) 247

Ramsbotham (Dr. Francis) obituary notice 19
Ramsbotham (Dr. John Hodgson), *of Leeds*, obituary notice . 18
RASCH (Dr.), case of hydramnios 55
Ray (Dr. Edward) *of Dulwich*, obituary notice . . . 16
RAYNER (Dr.), suggestions to Infant Mortality Committee . 148
RAYNES (Mr.) *of Gringley*, suggestions to Infant Mortality Committee 148
Receipts and Expenditure of the Obstetrical Society, abstract of, for eleven years ending December, 1869 316
Report of the Auditors and Hon. Librarian for 1868 . 12, 13
RIGDEN (Mr. Walter), on the age at which menstruation commences 243
ROBERTS (Dr. Lloyd), fibroid polypus of the fundus uteri removed by écraseur; recovery 244
—— case of spina bifida 313
ROGERS (Dr. J. F.), case of double monstrosity . . 128

PAGE

ROGERS (Dr. W. R.), unusual appearance of an ovum thrown off at the second month 80
—— elephantine development of clitoris 84
—— *Remarks* on Dr. Meadows' case of amputation of the cervix 105-6
—— —— on Dr. G. Hewitt's paper on peritoneal adhesions of gravid uterus 118, 120
—— —— at the meeting on the Amalgamation Scheme . 161
—— —— on cases of labour complicated with ovarian disease . 202
—— —— on Dr. Aveling's mode of treatment in prolapsus uteri 217
—— —— on Dr. Barnes's paper on the treatment of hæmorrhage after labour 235
ROUTH (Dr.), new intra-uterine pessary to correct deviations, &c. 53
—— new vesico-vaginal speculum holder 125
—— *Remarks* on Dr. Martyn's case of extra-uterine pregnancy 61
—— —— on different treatments of ulceration of the cervix uteri 94
—— —— on the remediable character of fibrinous deposits . 98
—— —— on Dr. G. Hewitt's bead suture for perineal operations 121
—— —— on the food of infants, in the adjourned discussion on infant mortality 189
—— —— on Mr. Warn's case of labour complicated with ovarian disease 200
—— —— on Dr. Aveling's and Huguier's mode of treatment in prolapsus uteri 218

SASS (Mr.), anencephalous fœtus 31
SCOTT (Mr.), *Remarks* on Dr. Martyn's case of extra-uterine pregnancy 62
SEDGWICK (Dr.) *Remarks* at the meeting on the Amalgamation Scheme 163
SMITH (Dr. Heywood) *Remarks* at the meeting on the Amalgamation Scheme 162, 166
—— —— on Dr. P. Smith's instrument in cases of misplacement of the uterus 172
SMITH (Mr. J. E.), *of Hay*, suggestions to Infant Mortality Committee. 147
SMITH (Dr. Protheroe), instrument to aid the abdominal muscles in parturition, and to form a fixed point for attachment of pessaries 169

PAGE

SMITH (Dr. Protheroe) *Remarks* on the resistance of the mucous membrane of the cervix to the action of the écraseur . 105
—— —— on Dr. L. Tait's case of reduction of chronic inversion of the uterus by sustained pressure . . . 176
—— —— on Dr. Westmacott's whalebone-loop . . 183
—— —— on Dr. Woodward's paper on mechanical support during labour 196
SMITH (Dr. Tyler), case of puerperal fever treated by the injection of ammonia into the veins, followed by recovery . 247
—— *Discussion* on ditto 250
—— *Remarks* in moving the first resolution, &c., at the meeting on the Amalgamation of the Medical Societies . 154, 162, 166
—— *Remarks* on the use of ergot of rye in preventing post-partum hæmorrhage 238
Societies, Amalgamation of the Medical, Special General Meeting on 151
—— *Letter from the Secretary of the Royal Medical and Chirurgical Society* 151
—— *Resolutions proposed by the Council of the Obstetrical Society, and discussion thereon* . . . 152—66
—— *Delegates nominated for the General United Committee* . 167
SPAULL (Mr. B.) *Remarks* on a case of excessive post-partum hæmorrhage from supposed peritoneal adhesions . 120
Special General Meeting on the Question of the Amalgamation of the Medical Societies 151
Speculum, new vaginal (Dr. Meadows) . . . 3
—— holder, new vesico-vaginal (Dr. Routh) . . 125
Spina bifida, case of (Dr. Lloyd Roberts) . . . 313
—— anencephalous fœtus with (Dr. E. Jones) . . 209
SQUAREY (Dr.) *Remarks* at the meeting on the Amalgamation Scheme 160
SQUIRE (Mr.) *Remarks* at the meeting on the Amalgamation Scheme 161, 164, 166
Styptic colloid, cure of inveterate case of ulceration of cervix by (Dr. Wynne) 86
Support, mechanical, during labour (Dr. W. Woodward) . 192
—— ditto (Dr. P. Smith) 169
Suture, bead, for perinæal operations (Dr. Graily Hewitt) . 121

TAIT (Dr. Lawson), reduction of chronic inversion of the uterus by sustained pressure 174
—— *Discussion* on ditto 176

PAGE
TAPSON (Mr. J. A.), placenta and knotted cord . . 242
Teething, on (Dr. Selby Norton) 183
TILT (Dr.) *Remarks* at the meeting on the Amalgamation of the Medical Societies 159
Tracheotomy, successful in croup, lasting fifty-seven hours (Dr. Cory) 78
Triplets, case of, at eight months of pregnancy (Dr. W. Martyn) 208
Tumour, fibroid, of uterus (Mr. Chambers) . . . 31
—— —— removed by single-wire écraseur (Dr. Murray) . 78
—— sub-peritoneal fibrous, with fibroid degeneration of uterus (Dr. Edis) 34
Turnbull (Dr. M. W.), of Melbourne, obituary notice . . 15
Tutin (Mr. John Hasledine), of Ripon, obituary notice . 18
Twins, observations on cases of [relative occurrence of one or two amniotic sacs] (Dr. Brunton) . . . 67
—— with secundines from a case of hydrops amnii (Dr. G. Hewitt) 37
—— on an hereditary twin-bearing family (Mr. Curgenven) . 106
—— case of triplets at eight months of pregnancy (Dr. W. Martyn) 208

Ulceration of cervix uteri, inveterate case of, cured by styptic colloid (Dr. Wynne) 86
Umbilical cord, knotted (Dr. Brunton) . . . 54
—— —— (Mr. Tapson) 242
—— —— of unusual character (Dr. Murray) . . 54
Urethra, female, abscess of (Dr. Cory) . . . 65
Uterine sound (Prof. Lazarewitch) . . . 78
—— stems (intra-) of vulcanite (Prof. Lazarewitch) . . 78
Uterus, chronic inversion of, reduction by sustained pressure (Dr. L. Tait) 174
—— prolapsus and procidentia of, new principle of treatment in (Dr. Aveling) 215
—— rupture of, death of fœtus, blood poisoning, &c., recovery of patient (Dr. Greenhalgh) 9
—— large polypus of (Dr. Gervis) . . . 4
—— fibroid tumour of (Mr. Chambers) . . . 31
—— fibroid degeneration of, with subperitoneal fibrous tumours (Dr. Edis) 34
—— fibroid outgrowth from the fundus of (Mr. Spencer Wells) 73, 97

PAGE

Uterus, fibroid polypus of the fundus of, removed by écraseur, recovery (Dr. Lloyd Roberts) 244
—— gravid, peritoneal adhesions of, as a cause of post-partum hæmorrhage (Dr. G. Hewitt) 108
—— —— ruptured in seventh month of pregnancy, death from peritonitis (Mr. Mitchell) 204
—— see *Cervix*.

Vagina, congenital imperforate, four cases of, and one of congenital phymosis in the same family (Dr. H. M. Madge) . 213
Vaginal speculum, new (Dr. Meadows) . . .
Veins, injection of ammonia into, in puerperal fever, recovery (Dr. Tyler Smith) 247

Walters (Mr.) *of Faringdon*, suggestions to Infant Mortality Committee 147
Warn (Mr. R. T.) case of labour complicated with ovarian disease 198
—— *Discussion* on ditto 200
Wells (Mr. Spencer) fibroid outgrowth from the fundus uteri 73, 97
—— *Report* on ditto, by Dr. B. Hicks . . . 76
—— on the complication of pregnancy with ovarian disease . 251
—— *Remarks* on sudden death from a rupture of a varix . 83
—— —— on Dr. Wynne's paper on styptic colloid in ulceration of the cervix 94
—— —— on the causes of accidents in the application of the écraseur 105
—— —— on peritoneal adhesions of gravid uterus after ovariotomy 120
—— —— on the danger of injections of ammonia . . 250
—— —— on the management of ovarian tumour complicating pregnancy 267
Westmacott (Dr.) on the use of the whalebone-loop in delivery 177
—— *Discussion* on ditto 183
Whalebone loop, on its use in delivery (Dr. Westmacott) . 177
Williams (Dr. Wynn) heart and lungs of an infant, who died at fourteen days old 242
—— *Remarks* on the use of tannic acid in ulceration of the cervix 94
—— —— on a case of peritoneal adhesions of the gravid uterus, with slight post-partum hæmorrhage . . . 119

PAGE

WILLIAMS (Dr. Wynn) *Remarks* at the meeting on the Amalgamation Scheme 164
—— —— on the treatment of post-partum hæmorrhage by perchloride of iron 236
WILTSHIRE (Dr.) *Remarks* on ovariotomy in cases of labour complicated with ovarian disease . . . 202
—— *Remarks* on the uselessness of tapping in solid ovarian tumour complicating pregnancy . . . 267
WOODMAN (Dr. B.) *Remarks* in discussion on Dr. B. Hicks's cases of pregnancy with ovarian disease . . 266
WOODWARD (Dr. Wm.) on mechanical support during labour . 192
WORSHIP (Mr. J. L.) case of ovarian disease . . 76
—— case of extra-uterine tubal fœtation . . . 211
—— *Remarks* on sudden death from rupture of a varix . 83
WYNNE (Dr. James) inveterate case of ulceration of the cervix uteri, cured with styptic colloid . . . 86
——*Discussion* on ditto 93

YEAMAN (Dr.) *of Glasgow*, suggestions to Infant Mortality Committee 145

Vol. X, p. 268, *read* M. Bonjean, of Chambery, separated by means of æther the poisonous oil from ergot.

OBSTETRICAL SOCIETY.

ADDITIONS TO THE LIBRARY

BY DONATION OR PURCHASE DURING THE YEAR 1869.

	Presented by
BARNES (Robert). Lectures on Obstetric Operations, including the treatment of Hæmorrhage, and forming a guide to the management of difficult Labour. 8vo. Lond. 1870	The Author.
BARRIER (F.). Traité pratique des Maladies de l'Enfance; troisième édition. 2 vols. 8vo. Paris, 1861	Purchased.
BEATTY (Thomas Edward). Contributions to Medicine and Midwifery. *plates*, 8vo. Dublin, 1866	Ditto.
BECQUEREL (L. A.). Traité clinique des Maladies de l'Utérus et de ses annexes. 2 vols., *and atlas of plates*, 8vo. Paris, 1859	Ditto.
BEIGEL (Hermann). De Morbo Brightii et Eclampsia Puerperali, dissertatio inaug. Medica. 8vo. Berolini, 1856	The Author.
——— Zur Lehre vom Milzbrand [Pustula Maligna] beim Menschen. 12mo. Berlin, 1862	Ditto.
——— Balneologische Notizen über die Kurmittel des Bades Reinerz in Schlesien, mit besonderer Berücksichtigung der daselbst eingerichteten jodhaltigen Moorbäder. *diagrams*, 8vo. Erlangen, 1863	Ditto.
——— Blaue Haare (from Virchow's Archiv) *plate*, 8vo. 1868	Ditto.
——— Recidiv eines papillösen Cystosarkoms der Bauchhöhle (from Virchow's Archiv). *plates*, 8vo	Ditto.

Presented by

BEIGEL (Hermann) see *Hewitt*, die Frauen-Krankheiten (Deutsch herausgegeben).

——— see *Reynolds*, Epilepsie (Deutsch herausgegeben).

——— see *Sims*, Gebärmutter-Chirurgie (Deutsch herausgegeben).

BERTIN (Émile). Étude critique de l'Embolie dans les vaisseaux veineux et artériels. 8vo. Paris, 1869 Purchased.

BLACHE (H. René). Essai sur les Maladies du Cœur chez les Enfants. 8vo. Paris, 1869 Ditto.

BOZEMAN (Nathan). Operation of Vesico-Vaginal Fistule, without the aid of assistants; with a view of the relative merits of the clamp, interrupted silver, and button sutures. *woodcuts*, 8vo. New York, 1869 Ditto.

BRAIDWOOD (Peter Murray). On Pyæmia or Suppurative Fever (Astley Cooper Prize Essay for 1868). *coloured plates*, 8vo. Lond. 1868 Ditto.

BRANDAU (J. V.). Beitrag zur Lehre vom allgemein oder gleichmässig zu engen Becken. *plate*, 8vo. Marburg, 1866 Dr. Hecker.

BRAUN (M.) see REPORTS (*Lying-in* Institutions).

BRESLAU (B.) see *Hecker*.

BYRNE (John Aug.). Case of Rupture of the Uterus, in which recovery took place. 8vo. Dublin, 1862 The Author.

——— Remarkable Case of Puerperal Fetid Pulmonary Abscess. 8vo. Dublin, 1866 Ditto.

——— Case of Early Abortion; hæmorrhage; retention of the placenta, and removal. 8vo. Dublin, 1867 Ditto.

——— Observations on Puerperal Fever and Puerperal Mortality in reply to Dr. Evory Kennedy's paper "On Zymotic Diseases and Puerperal Fever." 8vo. Dublin, 1869 Ditto.

CHARPENTIER (L. A. A.). Des Maladies du Placenta et de ses Membranes. 8vo. Paris, 1869 Purchased.

	Presented by
CHURCHILL (Fleetwood). The Diseases of Children; second edition. 12mo. Dublin, 1858	Purchased.
CLELAND (John). See *Quain's* Anatomy.	
COHNSTEIN (J.). Beiträge zur Therapie der chronischen Metritis. 8vo. Berlin, 1868	Ditto.
CONDIE (D. Francis). A Practical Treatise on the Diseases of Children; sixth edition 8vo. Philad., 1868	Ditto.
DECORNIÈRE (A.). Essai sur l'Endocardite Puerpérale. 8vo. Paris, 1869	Ditto.
DUNCAN (J. Matthews). Fecundity, Fertility, Sterility, and allied topics. 8vo. Edin. 1866	Ditto.
——— A Practical Treatise on Perimetritis and Parametritis 8vo. Edin. 1869	Ditto.
DUNNE (James). On the Duration of Gestation; and a new theory of the causes of Parturition. 12mo. Dublin, 1869	Ditto.
ELLEAUME (A.). Traité élémentaire des Maladies des Femmes. *woodcuts*, 8vo. Paris, 1869	Ditto.
ELLIS (Edward). A Practical Manual of the Diseases of Children; with a Formulary. 8vo. Lond. 1869	Ditto.
FABBRI (Giambattista). Del Parto Pretermesso o Mancato nei bruti domestici e nella specie umana. 4to. Bologna, 1866	The Author.
FINLAYSON (James). The Normal Temperature in Children. 8vo. Glasgow, 1869	Ditto.
——— On the Temperature of Children in Phthisis and Tuberculosis. 8vo. Glasgow, 1869	Ditto.
FÖRSTER (Emile). De l'Eclampsie Puerpérale; de ses causes, et spécialement de son Traitement: Thèse. 4to. Strasbourg, 1867	Purchased.
GÉRY (Père). Caractères qui établissent la Viabilité chez les Nouveau-nés, au point de vue de la Médecine Légale. 8vo. Paris, 1869	Ditto.
GIBB (Sir G. D.). The Laryngoscope in Diseases of the Throat, with a chapter on Rhinoscopy; third edition. 8vo. Lond. 1868	The Author.
——— Discoveries in Science by the Medical Philosopher, an Oration before the Medical Society. 8vo. Lond. 1869	Ditto.

Presented by

GIORDANO (Scipione). Des Vomissements Incoercibles pendant la grossesse. 8vo. Paris, 1866 The Author.

——— Zolfo e Cholera, considerazioni. 8vo. Torino, 1867 Ditto.

——— Della Perdita involontaria d'Orina per Fistola Genito-orinaria. 8vo. Torino, 1868 Ditto.

GIRALDÈS (J.). Leçons cliniques sur les Maladies Chirurgicales des Enfants; recueillies par Bourneville et E. Bourgeois; revues par le Professeur. *woodcuts*, 8vo. Paris, 1869 Purchased.

GROSS (Charles F.). Deux Observations de Grossesse Trigemellaire avec leçons cliniques de M. le Professeur Stoltz. 8vo. Strasbourg, 1868 Ditto.

GUÉNIOT (—). Des Luxations Coxo-Fémorales, soit congénitales, soit spontanées, au point de vue des Accouchements. 8vo. Paris, 1869 Ditto.

GUSSEROW (A.). Krankheiten der weiblichen Sexualorgane. 8vo. The Author.

HAMON (L.). Manuel de Retroceps (Forceps asymétrique); description, manœuvre, mode d'emploi, &c., pour effectuer l'accouchement physiologique artificiel. 8vo. Paris, 1869 Purchased.

HARLEY (George). Successful Case of Extraction of Child by Cæsarean Section after the death of the Mother (from Edinb. Monthly Journal). 8vo. 1850 The Author.

With a portrait of the boy when in his sixteenth year.

HEARD (F. F.). On Criminal Abortion, see *Storer*.

HECKER (Guil. F. C.). Beiträge zur Lehre von der Schwangerschaft ausserhalb der Gebärmutter höhle. 4to. Marburgi, 1858 Dr. Hecker.

——— Worte der Erinnerung an Dr. B. Breslau 4to. München, 1867 Ditto.

——— see REPORTS (*Lying-in* Institutions, &c.).

HEWITT (Graily). Diagnose, Pathologie und Therapie der Frauen-Krankheiten; Deutsch herausgegeben von Hermann Beigel *woodcuts*, 8vo. Erlangen, 1869 Translator.

HODGE (Hugh L.). On Diseases peculiar to Women, including Displacements of the Uterus; second edition. 8vo. Philadelphia, 1868 The Author.

Presented by

KENNEDY (Evory). Hospitalism and Zymotic Diseases, as more especially illustrated by Puerperal Fever or Metria; second edition.
diagram, 8vo. London and Dublin, 1869 Purchased.

——— ——— Reply to, see *Byrne* (J. A.).

KIDD (G. H.). On Cephalotripsy. 8vo. Dublin, 1867 The Author.

——— Observations on the Construction of the Cephalotribe (from Brit. Med. Journal). 8vo. 1867 Ditto.

KŒBERLÉ (E.). Résultats Statistiques de l'Ovariotomie.—Compte Rendu de [ses] Opérations pratiquées en 1862-68. 8vo. Paris, 1868 Purchased.

KOLK, see *Schrœder* van der K.

KRIEGER (Eduard). Die Menstruation; eine gynäkologische Studie. 8vo. Berlin, 1869 Ditto.

LEAKE (John). Practical Observations on the Child-bed Fever, also on the nature and treatment of Uterine Hæmorrhages, Convulsions, and other acute diseases, most fatal during pregnancy; third edition. 8vo. Lond. 1775 Dr. J. M. Butler.

——— Medical Instructions towards the prevention and cure of Chronic or Slow Diseases peculiar to Women; the third edition. 8vo. Lond. 1777 Ditto.

LE FORT (Léon). Des Maternités: étude sur les Maternités et les Institutions Charitables d'Accouchements a Domicile dans les principaux états de l'Europe. 4to. Paris, 1866 Dr. Barnes.

LEYNSEELE (Van). Résumé du cours d'Accouchements donné à l'Université de Gand. (Printed in Lithography.) 4to. Gand, 1866 Purchased.

LIGNEROLLES (H. de). Recherches sur la Région de l'Ombilic et les fistules hépatiques ombilicales. 8vo. Paris, 1869 Ditto.

LINAS (A.) see *Nonat*, Maladies de l'Utérus.

LOUMAIGNE (I.). De la Hernie de l'Ovaire. 8vo. Paris, 1869 Ditto.

LOVATI (Teodoro). Manuale del Parto meccanico od istrumentale. 12mo. Milano, 1854 Prof. Lazzati.

Presented by

M'Clintock (A. H.). Remarks on Puerperal Fever and the mortality in Childbed.
8vo. Dublin, 1869 The Author.

Marshall (John). Outlines of Physiology, Human and Comparative.
woodcuts, 2 vols. 12mo. London, 1867 Purchased.

Mayer (Carl), notice of, see *Virchow*.

Meissner (Emil Apollo). Mittheilungen über die Thätigkeit und die Verhandlungen der Gesellschaft für Geburtshülfe zu Leipzig.
8vo. Leipzig, 1869 The Author.

Miller (Henry). Report of the Obstetric Committee of the Kentucky State Medical Society on Anæsthesia in Midwifery, and the Speculum Uteri.
8vo. Louisville, Ky., 1853 Ditto.

——— The Principles and Practice of Obstetrics, including the treatment of chronic inflammation of the Uterus considered as a frequent cause of Abortion.
photographic portrait, 8vo. Philadelphia, 1858 Ditto.

——— Two Cases of Encysted Tumour of the Ovary successfully treated by excision, and attempt to justify the operation of ovariotomy under certain circumstances.
8vo. Philadelphia, 1859 Ditto.

——— Address to the American Medical Association, June 5th, 1860.
8vo. Philadelphia, 1860 Ditto.

——— Brief Notes of four additional Cases of Ovariotomy (from Amer. Journal of Med. Sciences). 8vo. 1869 Ditto.

——— Lectures in reply to Croonian Lectures for 1854 of Charles West, of London, on the pathological importance of Ulceration of the Os Uteri. 8vo. Louisville, 1855

Montfort (Léon-Constantin). Étude sur les Déchirures de la Vulve et du Perinée pendant l'accouchement. 8vo. Paris, 1869 Purchased.

Neugebauer (Ludwig Adolph). Morphologie der menschlichen Nabelschnur.
plates, 8vo. Breslau, 1858 The Author.

		Presented by
NEUGEBAUER (L. A.). Ein neuer Mutterspiegel.	*plate*, 4to. 1858	The Author.
——— Beitrag zur Lehre von der durch partielle Verwachsung der Rima vulvae erschwerten Geburt.	*plates*, 8vo. 1864	Ditto.
——— Bericht über eine mit Erfolg ausgeführte Ovariotomie.	8vo. Leipzig, 1868	Ditto.
——— Collection of thirteen Tracts by him in the Polish language.	8vo. 1856–68	Ditto.
On Spontaneous Evolution of the Fœtus, Ovariotomy, and other Obstetric subjects.		
Nomenclature of Diseases, drawn up by a joint Committee appointed by the Royal College of Physicians of London [edited, with index, by Francis Sibson, M.D.]	roy. 8vo. Lond. 1869	Royal College of Physicians.
——— another copy,	roy. 8vo. Lond. 1869	Purchased.
NONAT (Aug). Traité pratique des Maladies de l'Uterus, de ses annexes, et des organes génitaux externes; deuxième édition, augmentée par A. Linas: première partie.	8vo., Paris, 1869	Ditto.
PERUZZI (D.). Aperçu historiqne sur l'origine, et les progrès de l'Ovariotomie en Italie. Lettre à A. A. Boinet.	8vo Lugo, 1869	The Author.
PLOSS (H. H.). Ueber die Operations frequenz in geburtshülflichen Kliniken und Polikliniken (Gesells. für Geburtshülfe zu Berlin),	4to. Leipzig, 1869	Ditto.
POPPEL (J.). Ueber Herzlose Missgeburten, Inaug. Diss.	*plate*, 8vo. 1862	Dr. Hecker.
——— Ueber den Scheintod Neugeborener, inaugural Abhandlung.	8vo. 1865	Ditto.
——— Ein neuer Beitrag zur Aetiologie der Kindeslage.	8vo. Leipzig,——	Ditto.
——— see REPORTS (*Lying-in* Institutions).		
PUECH (Albert). De l'Atrésie des Voies Génitales de la Femme.	4to. Paris, 1844	Purchased.
QUAIN (Jones). Elements of Anatomy, seventh edition, edited by William Sharpey, Allen Thompson, and John Cleland.	*woodcuts*, 2 vols. 8vo. Lond. 1867	Ditto.

Presented by

REYNOLDS (J. Russell). Epilepsie ihre Symptome, Behandlung und ihre Beziehungen zu andern chronisch-convulsiven Krankheiten; deutsch herausgegeben von Hermann Beigel.
8vo. Erlangen, 1865 Translator.

RIZZOLI (Francesco). Collezione delle [sue] Memorie Chirurgiche ed Ostetriche.
plates, 2 vols. 4to. Bologna, 1869

ROGER (Henri). Séméiotique des maladies de l'Enfance; leçons professées en 1863.
8vo. Paris, 1864 Purchased.

SCHROEDER VAN DER KOLK (J. L. C.). Waarnemingen over het Maaksel van de Menschelijke Placenta en over haren Bloeds-omloop.
plates, 4to. Amsterdam, 1851 Dr. B. Hicks.

——— [Translation of the previous]. Observations on the Structure of the Human Placenta, and on the circulation of the blood in it. M.S. folio Ditto.

SEATON (Edward C.). A Handbook of Vaccination.
12mo. Lond. 1868 Purchased.

SHARPEY (William) see *Quain's* Anatomy.

SIMS (J. Marion). Klinik der Gebärmutter-Chirurgie mit besonderer Berücksichtigung der Behandlung der Sterilität; deutsch herausgegeben von Hermann Beigel.
woodcuts, 8vo. Erlangen, 1866 Translator.

SMITH (J. Lewis). A Treatise on the Diseases of Infancy and Childhood. 8vo. Philad. 1869 Purchased.

SPIEGELBERG (Otto). Geburtshülfe (from Virchow's Jahresbericht). 8vo. 1868 The Author.

STANESCO (G. C.). Recherches cliniques sur les Rétrécissements du Bassin; basées sur 414 cas. *tables*, 8vo. Paris, 1869 Purchased.

STEFFEN (A.). Klinik der Kinderkrankheiten. Vols. 1 and 2 (pt. 1). 8vo. Berlin, 1865— Ditto.

STOLTZ (Prof.). Leçons cliniques, see *Gross*.

STORER (Horatio R.) and Franklin F. HEARD. Criminal Abortion; its Nature, its Evidence, and its Law. 8vo. Boston, 1868 Purchased.

Presented by

THOMAS (J.). A comprehensive Medical Dictionary; containing the pronunciation, etymology, and signification of the terms made use of in medicine and the kindred sciences. 8vo. Philad., 1865 Purchased.

THOMAS (T. Gaillard). The history of Four Cases of Chronic Inversion of the Uterus, with the account of an operation designed as a substitute for Amputation (from Amer. Journal of Obstetrics). 8vo. 1869 The Author.

THOMPSON (Allen) see *Quain's* Anatomy.

TROQUE (Jules). Etude critique sur la Dysménorrhée Membraneuse. 8vo. Paris, 1869 Purchased.

VIRCHOW (Rudolf). Gedächtnissrede auf Carl Mayer, Juni, 1868. 8vo. Berlin, 1869 The Author.

WAHLTUCH (Adolph). Dictionary of Materia Medica and Therapeutics. 8vo. Lond. 1868 Ditto.

——— On Catalepsy. 8vo. Lond. 1869 Ditto.

WINCKEL (F.). Klinische Beobachtungen zur Pathologie der Geburt. 8vo. Rostock, 1869 Purchased.

WINN (J. M.). On the nature and treatment of Hereditary Disease, with reference to a Correlation of Morbific Forces. 8vo. Lond. 1869 The Author.

WURSTER (G.). Ueber die Eigenwärme der Neugebornen. 8vo. 1869 Dr. Gusserow.

TRANSACTIONS.

CLINICAL SOCIETY OF LONDON—
Transactions, vol. 2. 8vo. 1869 The Society.

MEDICAL (ROYAL) AND CHIRURGICAL SOCIETY—
Medico-Chirurgical Transactions, vol. 52. 8vo. 1869.

——— Proceedings, vol. 6. 8vo. 1868-9 Ditto.

St. ANDREW'S MEDICAL GRADUATES' ASSOCIATION— The
Transactions, vol. 2, 1868. 8vo. Lond. 1869 Association.

JOURNALS.

		Presented by
Calendar of the Royal College of Surgeons of England.	8vo. 1869	The Council of the College
Braithwaite (W.). Retrospect of Medicine (with General Index, vols. 53 to 58 inclusive), vols. 57—	12mo. 1868—	Purchased.
British and Foreign Medico-Chirurgical Review, vol. 4—	8vo. 1868—	Ditto.
British Medical Journal, from 1868.	4to.	Ditto.
Dublin Quarterly Journal of Medical Science, vol. 47—	8vo. 1869—	The Editor.
Edinburgh Medical Journal, vol. 13—	8vo. 1868—	Purchased.
Glasgow Medical Journal, New Series, vol. 1—	8vo. 1868—	
Lancet (The), from 1868.	4to.	Ditto.
Medical Press and Circular, from 1868.	4to.	Ditto.
Medical Times and Gazette, from 1868.	4to.	Ditto.
Practitioner (The), a Monthly Journal of Therapeutics (from its commencement in 1868).	8vo. 1869—	Ditto.
Archives Générales de Médecine.	8vo. 1868—	Ditto.
Gazette Médicale de Paris. Troisième Série, vol. 24—	4to. 1869—	Ditto.

REPORTS.

Hospitals—St. Bartholomew's Hospital Reports, vol. v—	8vo. 1869—	The Hospital Staff.
——— Guy's Hospital Reports; third series.	from vol. 14, 8vo. Lond. 1869—	The Editors.
——— St. Thomas's Hospital, Statistical Report of Patients from 1861 to 1865, by William H. Stone,	8vo. Lond. 1869	Treasurer of Hospital.

		Presented by
LYING-IN INSTITUTIONS—Glasgow Maternity or Lying-in Hospital and Dispensary. Annual Reports, from the twenty-fourth for 1858, to the present time.	8vo. 1859	Dr. J. G. Wilson.
——— Bericht über die Ereignisse in der unter der Leitung Prof. Hecker's geburtshülflichen Poliklinik der Ludwig-Maximilians-Universität zu München 1859-65, von M. Braun und J. Poppel.	8vo. 1862—66	Dr. Hecker.
——— Kreis und Local Gebäranstalt München. Bericht über die Vorkommnisse in 1861—2 von Dr. Hecker.	4to. 1862	Ditto.
——— in 1868	4to. 1869	Ditto.
REGISTRATION— Annual Report of the Registrar-General of Births, Deaths, and Marriages in England for 1866—	8vo. Lond. 1868—	Purchased.
SANITARY CONDITION— Medical Officer of the Privy Council—Reports of, with Appendices, from 1867.	8vo. Lond. 1868—	Ditto.

MUSEUM.

Cephalotribe.	Dr. G. H. Kidd.
Four Casts of Fœtal Heads whose delivery was effected by cephalotripsy.	Ditto.